Time / Date (in SGT)	DAY 0 27 Feb 2023 (Monday)					
08:00 - 08:30	Max Afris, Foyer Registration					
08:00 - 10:30	Garnet Ballroom 216	Garnet Ba	illroom 217	Garnet Ballroom 218		
	HPCA Workshop 1 2nd International workshop on Arm-based HPC: Practice and Experience (IWAHPCE 2023)	HPCA W Multi-scale, Multi-physics and Coupled Pr	orkshop 3 oblems on highly parallel systems (MMCP)	HPCA Workshop 5 When HPC meets Quantum Computing: From System Design to Applications (HPC+Q)		
	08:30-08:35 Opening remarks by Miwako Tsuji and Misuhisa Sato	8:30 - 9:00  Opening Remarks  by Neds Ebrahmi Pour, Satine Roller and Ryoti Takabi  9:00 - 1:000  Keynote Taik "Enhanced-scale using AMR-based simulation for multiphase flows and fluid-structure interactions."		"The Hybrid Quantum – Supercomputer Platform Research at Riken" by Prof Satioshi Matsuoka, Director, RIKEN Center for Computational Science "News on Quantum Computing"		
	08.35-09-08   Keynote talk "Experiences from 4 years of running a production Arm-based supercomputer" by Simon McIntosh-Smith			by Prof Jose Ignacio Latorre, Director, Centre for Quantum Technologies  "Accelerating HPC with a distributed quantum computer network"		
	09:08-09:38 "Performance Study on CPU based Machine Learning with PyTorch" by Smeet Chheda, Anthony Curtis, Eva Stegmann and Barbara Chapman	10:00	nyuki Acki - 10:30 ly Simulations of a Full-Scale Liquid Rocket Engine	by Dr Mikael Johansson, Manager, Quantum Technologies, CSC – IT Center for Science Ltd, Finland  "Bridging the gap between high-performance classical and quantum computing"  by Mr Eric Kievit, Chief Operating Officer, Oblox		
	06:38-10:08  "Application Experiences on a GPU-Accelerated Arm-based MPC Testabet" by Was Dissest, William Goby, Nich Hagen, J. G. Washer, Gross Hermander, Jon Balth, Ner Paul, Daminin Leiturn Grander, Biglish MacCartly, Versions Melesser Verpun, Boroson Messer, Ross Millic Stap Oral, Sergiel Bastrakov, Mchael Bussmann, Alexander Debus, Klass Seiniger, Jun Stephan, Rose Widen, Spencer Bryngston, Herry Le Bers, Arvander Sadschistnann, Erleifer Vorau, Gunita Ontandesschann, Floristo Corba. Opman Sirede, Kate Clark, Filipo Spiga, Jelf Hammond, Store John, David Hardy, Sebastion Kelter, Jean-Guillaume Piccinsì and Christian Total	Combustor" by Takanori Haga				
	10:08-10:20 "Optimization of NumPy Transcendental Functions for Arm SVE" by Fuyuka Yamada, Kentaro Kawakami, Kouji Kurihara, Kazuhito Matsuda and Tsuquchika Tabaru					
10:30 - 11:00 10:30 - 12:30	Garnet Ballroom 216		Break iliroom 217	Garnet Ballroom 218		
10.00 - 12.00	HPCA Workshop 1 2nd International workshop on Arm-based HPC: Practice and Experience (IWAHPCE 2023)	HPCA W	orkshop 3 oblems on highly parallel systems (MMCP)	HPCA Workshop 5 When HPC meets Quantum Computing: From System Design to Applications (HPC+Q)		
	11:00-11:22 "Wilson matrix kernel for lattice QCD on A64FX architecture" by Issaku Kanamori, Keigo Nitadori and Hideo Matsufuru	"MaMiCo: A Software for Coupled Mo	= 11:30 elcular-Continuum Flow Simulations" id Jafari	"Bringing Quantum Acceleration to HPC" by Dr Bruno G. Taketani, Doctor of Sciences (Physics), IGM Quantum Computers "GPU accelerated quantum computing at NVIDIA"		
	11:22-11:44  "Evaluating DAOS Storage on ARM64 Clients" by Michael Hennecke, Motohiko Matsuda and Masahiro Nakao	"Accelerating Domain-aware Deep Lea by Aishwa	– 12:00 rning Models with Distributed Training® rrya Sarkar	by Dr Jin-Sung Kim, Developer Relations Manager, Quantum Computing, NVIDIA  "Qubit efficient quantum algorithms for quantum optimization and chemistry problems" by Dr Dimitis G. Anqedakis, Assoc Predessor, COT NUS, TU Crete, and AngelQ		
	"OpenACC Execution Models for Manyorore Processor with ARM SVE" by Mitsuhisa Sato and Miwako Tsuji	12:00 Closing by Neda Ebrahimi Pour, Sa	– 12:30 Remarks bine Roller and Ryoji Takaki	"Multitasking for Quantum Annealing" by Dr Tian Huang, Research Scientist, IHPC, A'STAR		
	"Are we ready for broader adoption of ARIb in the MPC community: Performance and Energy Efficiency Analysis of Benchmarks and Applications Executed on High-End ARIb Systems" by Nikolay A. Simakov, Robert L. Deleon, Joseph P. White, Matthew D. Jones, Thomas R. Furlani, Eva Siegmann and Robert J. Marisson					
	12-28-12-30 Closing remarks					
12:30 - 13:30 13:30 - 15:30	Garnet Ballroom 216	Lu	nch	Garnet Ballroom 217		
	HPCA Workshop 2 International Workshop on Intel eXtreme Performance Users Group (IXPUG Wor	kshop HPC Asia 2023)	HPCA Workshop 4 Energy and Resource Efficiency of Data Centers (EREC)			
	13:30-13:40 Opening Remarks		13.30-13.45  Wilsome Address by Maximilian Hob, Lebniz Supercomputing Centre  13.45-14.30  "Reframing the Energy Cost of Computing" by Andress Centralexue, Lancium Compute  14.30-16.00  "Proactive Power Management In HOC Centers: Opportunities and Challenges" by Marin Schulz, Lebniz Supercompaning Centre  15.00-16.30  "Presentation by Marin Schulz, Lebniz Supercompaning Centre  15.00-16.30  "Resentation by Marin Schulz, Lebniz Supercompaning Centre  16.00-16.30  "Resentation by Marin Schulz, Lebniz Supercomp			
	Keynote Talk "Porting Simulation, Data-Intensive, and Al Applications to the Aur by Dr Timothy Williams, CPS Depusy Division Director, Agorore National Laboratory, Dr Verkar Vehavanshi, ALCP Data Scott Paker, ALCP Ferbra	Science Team Lead, Argonne National Laboratory and Dr.				
	14:30-15:00 "Understanding DAOS Storage Performance Scaling" by Michael Hennecke, Intel					
	Invited Talk: "Persistent Memory Supercomputer Pagasus for Data-driven and by Prof Osamu Tatebe, Center for Computational Sciences, University of Ts	I Al-driven Science" sukuba, Japan				
15:30 - 16:00 16:00 - 17:30	Garnet Ballroom 216	Tea	Break T	Cornel Ballinam 347		
10:00 - 17:30	Garnet Ballroom 216  HPCA Workshop 2  International Workshop on Intel eXtreme Performance Users Group Abbreviation: IXPL	JG Workshop HPC Asia 2023	Garnet Balloom 217  HPCA Workshop 4  Energy and Resource Efficiency of Data Centers (EREC)			
	16:00-16:30 "Implementation and Performance Evaluation of Collective Communications Using C by Kohe iKikuchi, Livivensiy of Tsukuba	CIRCUS on Multiple FPGAs"	"Machine Learning Based Modeling and Simulation of Computing Systems" by Aduly Hoise, Broschwen National Jaboratory			
	16:30-17:00 "Benchmarking Omni-Path Express" by Mr James Erwin, Serior Performance Engineer, Comelis Netw	orks	"Auto-tuning GPU code for Energy Efficiency" by Ben van Westhouse. Herbertands Science Center			
	17:00-17:10 Closing Remarks		17-00 Closing Remarks			

Time / Date (in SGT)				DA 28 Feb 202	Y 1 3 (Tuesdav)				
08:00 - 09:00 09:00 - 10:00	Acceptable								
				09	.00				
	Arrival of Guest-O-Henour								
				09:25 Welcom	Speech				
			by Mr	Quek Gim Pew, Chairman, National	Supercomputing Centre (NSCC) Sing	gapore			
				09:35 Opening Speech b	-09:45 y Guest-of-Honour search and Development), National R				
			by Ms Chan Lai Fun			Research Foundation			
				09:45 MoU \$	-09:55 igning				
		09:55-10:05							
				SCA Award					
10:05 - 10:35 10:35 - 12.05				Tea Break / E Peridot	chibition Open Ballroom				
				10:35	-11:05				
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	1105-1136								
			Keynote 2	2 "Energy Efficient Supercomputing by Mr Mark Stickells, Executive Dire	g in Australia: Strategies towards I tor, Pawsey Supercomputing Centre	Net Zero®			
	by Mr Maril, Stickells, Executive Director, Pawery Supercomputing Centre 11:361-205								
				Industry Lenovo + Intel "The Path to	Plenary Zero Emissions Computing" eral Manager HPC and Al WW, Lend				
			by			ovo			
12:05 - 13:30 13:30 - 15:30	Garnet Ballroom 212 & 213		Garnet Ballroom 21	Lu 5		Sarnet Ballroom 218		Garnet Ballroom 219	
	HPC ASIA 2023					Industry Track	NSCC HPC In	nnovation Challenge (HPCIC): 2022 Winners' Showcase & HPCIC	
	13-15-13-30		APAC HPC-AI Competition 2023 (HPCAIAC) To	rack Chair: Dr Gabriel Meeie		k Chair: Dr Jemej Zidar		2023 Announcement Track Chair: Stephanie Soh	
	Opening Session by Prof Dhabaleswar K. (DK) Panda, Professor and Distinguishe	d Scholar,	APAC HPC-AI Competition 2023 (HPCAIAC) To	aux Graff: Dr Gabriel Noaje	DUG Technology (Australia) Pty	13:30-13:50 Ltd "Accelerating the translation of research and	Introd	duction to NSCC and HPC Innovation Challenge (HPCIC)	
	Computer Science and Engineering, Ohio State University (OSU), Ur America and Prof Taisuke Boku, Director & Professor, Center for C Sciences, University of Tsukuba, Japan		Opening by Dr Gabriel Nosie. Representor of HPC-AI A	dvisory Council Singapore	comme	rcialisation with HPCaaS" Chief Information Officer, DUG Technology	by Ms Angle	Huang, Serior Manager, National Supercomputing Centre (NSCC) Singapore	
	Sciences, University of Tsukuba, Japan 13:30-15:30					13:50-14:10	b., **. *	Introduction to HPCIC 2022 winning teams	
	13:30-15:30  Best Paper Finalist  Session Chair: Prof Ryohei Kobayashi, Assistant Professor, C.		14:05-14:20  "Accelerating Performance with In-Network C Supercomputers"	omputing for Power Limited	"The Myth of Tuned Perfor	Panasas Inc. mance in a Converged HPC and Al Workload	by Ms Angle	Huang, Senior Manager, National Supercomputing Centre (NSCC) Singapore	
	Session Chair: Prof Ryohei Kobayashi, Assistant Professor, Computational Sciences, University of Tsukuba, Japan	enser for	Supercomputers** by Mr Gilad Shainer, Chairman, HPC-Al A	Advisory Council, USA	by Mr Richio Aikawa, Senior Dire	Environment" ector, Strategic Marketing & Corporate Development Marketing, Panasas	HPCIC 2022 Winning Solution Showcase:		
	"Reducing shared memory footprint to leverage high throughput Cores and its flexible API extension library"		14:20-14:35 "NSCC ASPIRE2A: A Brief In	troduction"	'	14:10-14:30	Presentation b	by Team Aleph Technologies (Open: Winner) "Optimizing Industrial	
	Cores and its flexible API extension library" by Hiroyuki Ootomo and Rio Yokoto, Tokyo Institute of Technology, J Large Integer Multiplication with Arm SVE Instructions" by Takuya E	apan "Efficient	by Mr Muhammad Teguh Satria, Assistant S Supercomputing Centre (NSCC	ystem Manager, National 3) Singapore	HPC	14:10-14:30  Al Technology Pte. Ltd. caling Al Models in Big Model Era"	by Mr	Energy Efficiency with Cognitive Digital Twins" Suwira Teo, Co-Founder, Aleph Digital Technologies Pte. Ltd	
	Daisuke Takahashi, University of Tsukuba, Japan		14:35-14:50		by Dr You Yang, Presidential Y	caling Al Models in Big Model Era"  /oung Professor, National University of Singapore,  Al Technology Pte. Ltd.	F	Presentation by Team Geo Pulse (Open: 1st Runner Up) "Supercomputing Subsurface Utility Mane"	
	"Effectiveness of the Oversubscribing Scheduling on Super	computer	"NCI HPC/Al/Data Science skill building	vision and evolution" iness Development and User		14:30 - 14:50	by Mr Foo Zhi Rui, Operations Development Executive, HSC Pipeline Engineering Pte Ltd  Pte Ltd		
	Systems" by Shohei Minami, Toshio Endo, and Akhikiro Nomura, Tokyo Institute of Technology, Japan		by Dr Jingbo Wang, Acting Deputy Director, Bus Engagement, NCI Aust	ralia	14:30 – 14:50 Lenovo + Intel "Combining High Performance Computing, Genomics, and Al to enable Precision Medicine" by Mr Ananda Sekhar Bhattacharjee, Head – HPC and Al (Asia Pacific), Lenovo				
	II A new data comparation method for mixed precision Kndows	ahrasa with	14:50-15:00 "How the HPC – Al Skills Changed My Life aft International Competition: a Report of Thai	er Actively Participate in an	"Combining High Performs F	Precision Medicine"	Presentation by Team Virids (Student: Vinner)  "Enabling a Greener Singapore"  by Mr Lim Sui Kiat, Student, Nanyang Technological University; Mr Chang Dao Zheng, Student, Nanyang Technological University; Mr Chay Hui Xiang, Student, Nanyang Technological University, Mr To Rem Jul. Student, Singapore		
	FP16/BF16 Jacobi preconditioners" by Takuya Ina, Japan Atomic Energy Agency, Yasuhiro Idomura, J Energy Agency, Toshiyuki Imamura, RIKEN; and Naoyuki Onodera,	anan Atomic	International Competition: a Report of That by Asst Prof Dr Worawan Diaz Carballo,	Students' Perspective." Thammasat University	by mi reminda dekilai bhattac	14:50-15:10			
	by Taxuya ina, Japan Atomic Energy Agency, Yasuniro Idomura, J Energy Agency, Toshiyuki Imamura, RIKEN; and Naoyuki Onodera, Energy Agency, Japan	Japan Atomic	4500.4540		14:50-15:10 Attair		Nanyang Technological University; Mr Teo Ren Jie, Student, Singapore Management University		
	Ellergy Agency, Japan		2022 APAC HPC-AI Competi by Mr Gilad Shainer, Chairman, HPC-AI Advisory C Chief Executive, National Supercomputing Centre Wang, Acting Deputy Director, Business Developm	tion Award ouncil, USA A/Prof Tan Tin Wee.	"TEN WAYS IN WHICH ALTAIR IS SAVING THE PLANET WITH HPC" by Dr Rosemary Francis, Chief Scientist HPC, Altair 15/10-15-30  METHERS 0075 LYD.		by Me Annin	Soft Launch: HPCIC 2023  Husbra Senior Manager, National Supercomputing Centre (NSCC)	
			Chief Executive, National Supercomputing Centre Wang, Acting Deputy Director, Business Developm	(NSCC) Singapore Dr Jingbo ent and User Engagement, NCI			by Ms Angie Huang, Senior Manager, National Supercomputing Centre (NSCC) Singapore		
		wang, Acong Deputy Direc		Australia		NETWEB PTE LTD "Building Cloud Native solutions for HPC and AI" by Mr Sandeep Lodha, CEO & Director, Netweb Pte. Ltd.		Q&A Closing Remarks	
			15:10-15:20 "A Champion of Student Cluster Competitio						
		"A Champion of Student Clauster Competition: 10 years in the making" by Pird Jeny Chou, National Tanghlus University							
			15:20-15:30  "The Development of the SUSTech Su by Mr Zunyao Mao, Student, Southern Universit	percomputing Club"					
45.00			by Mr Zunyao Mao, Student, Southern Universit						
15:30 - 16:00 15:30 - 16:00	Tea Break Garnet Ballroom 212 & 213			Garnet Ballroom 215		Tea Break Garnet Ballroom 217		Garnet Ballroom 218	
	HPC ASIA 2023		HPC Centre Leaders Forum Track Chair: Dr Wang Jingbo	APAC HPC-Al Compe	tition 2023 (HPCAIAC)	Unlocking the Potential of HPC-AI		Industry Track	
	16:00 – 18:00		15:30-15:35	Track Chair: E		(By Invitation Only) Track Co-Chair: Mr Danny Lim, Mr Chung Sh	nin Yee	Track Chair: Dr Jernej Zidar 16:00-16:20	
	Programming Models and Systems Session Chair: Ms Miwako Tsuji, Research Scientist, RIKEN R-	by Dr V	Introduction and Welcome /ang Jingbo, Acting Deputy Director, Business nt and User Engagement, National Computational	"High-Performance and Scala	ole Middleware for HPC At and	15:30-15:45		16:200-16:20 Lenovo + Intel	
	CCS, Japan  "Fault Tolerance for Ensemble-based Molecular-Continuum	Developme	Infrastructure, Australia by Prof Dhabaleswar K (DK)  15:35-15:50 Distinguished Scholar,  10:0000000000000000000000000000000000		anda, Professor and University	Opening Address by A/Prof Tan Tin Wee, Chief Executive, National Supercomputing Centre (NSCC) Singapore	ational	Lenovo + Intel "TruScale for HPC - Enabling HPC for all" by Mr Wil Wellington, Global Director, HPC Professional Services,	
	"Fault Tolerance for Ensemble-based Molecular-Continuum Flow Simulations" by Vahid Jafari and Philipp Neumann, Helmut Schmidt University,	"Emnoue-i-			The Ohio State University Supercomputing Centre (NSCC) Singa; 30-17:00 15:45-16:05			Lenovo 16:20-16:40	
	by Vahid Jalan and Philipp Neumann, Helmut Schmidt University, Germany	by Dr V	at NCI"  /ang Jingbo, Acting Deputy Director, Business	"Al-Driven Visual C by Assoc Prof Ziwei Liu, As	ontent Generation"	"Generative AI – Trends from an Industry Per by Dr Tomasz Bednarz, Director, Strategic Re	rspective"	TechSource Systems Pte Ltd	
	"Comparison of Reproducible Parallel Preconditioned BiCGSTAB Algorithm Based on ExBLAS and ReproBLAS"	Developme	nt and User Engagement, National Computational Infrastructure, Australia	Technologic	al University	Engagement – APAC and EMEA, NVID	IA .	Performance Computing for All" by Dr Vineet Jacob Kuruvilla, Principal Industry Manager at	
	by Xiaojun Lei, Graduate School of Chinese Academy of		15:50-16:05	17:00	-17:20	16:05-16:25	e Trained"	MathWorks, TechSource	
	by Xiaojun Lei, Graduate School of Chinese Academy of Engineering Physics, China; Tongxiang Gu, Institute of Applied Physics and Computational Mathematics, China; Stef Graillat, Sorbonne University, France; Xiaowen Xu, CAEP Software Center	by Dr Pivon	"Updates on ThaiSC" rut Srichaikul, Deputy Executive Director, National s and Computer Technology Center (NECTEC),	"RDMA-enabled Distribute by Mr Shuang Xie, CTO		Technical Talk "How Large-scale Models can b by Mr Jeff Adie, Principal Solutions Architect,		16:40-17:00 ASUS	
	for Numerical Simulation, China; and Jing Meng, Taishan University, China	Electronia	s and Computer Technology Center (NECTEC), Thailand	17:20 2023 APAC HPC-AI by Dr Jingbo Wang, Acting	17:25 Competition Launch	16:25-16:45 "Sustainable Al: The Challenges and Innov	rations"	"Building Next-Gen HPC and Al Clusters with NVIDIA" by Mr John Chan, Director, Al Solutions, PTC System (s) PTE LTD (ASUS)	
	II A Cons Study on DoCo Bostobility & Bosformones for		16:05-16:20	by Dr Jingbo Wang, Acting Development and I have E	Deputy Director, Business	"Sustainable Al: The Challenges and Innov by Dr Li Xiaoli, Department Head and Principal Sc Machine Intellection (MI) department, Institute for	ientist of the		
	Batched Discrete Fourier Transforms" by Mans Ivar Anderson and Stefano Markidis, KTH Royal Institute	"Updates fr	om the National Supercomputing Centre (NSCC)	Development and User E Dr Gabriel Noaje, Represente Sing	r of HPC-Al Advisory Council, apore	Research (I2R), & Investigator, Centre for Frontier (CFAR), A*STAR	Al Research	17:00-17:20 AWS	
	of Technology, Sweden	by A	Singapore" Prof Tan Tin Wee, Chief Executive, National spercomputing Centre (NSCC) Singapore	17-26	17:30	16:45-17:00			
	"Memory Usage Prediction of HPC Workloads Using Feature Engineering and Machine Learning"		40.00.40.05	Clo by Dr Gabriel Noaje, Represen Sing	sing for of HPC-Al Advisory Council.	Tea Break 17-00-17-45		by Dr Srinivas Tadepalli, Head of GTM, HPC and Accelerated Computing, AWS	
	Engineering and Machine Learning" by Md Nahid Newaz and Md Atiqul Mollah, Oakland University, USA	"Australia" Path to Ex	Pawsey Supercomputing Research Centre – A ascale HPC and Data, Quantum Computing and	Sing	apore	AI-HPC Roundtable Discussions -Track 1: AlxFoundation Models		17:20-17:40 AMD	
		by Mr Mark S	Radioastronomy" ickells, Executive Director, Pawsey Supercomputing			<ul> <li>Track 2: Quantum Computing</li> <li>Track 3: Modelling, Simulation and Digital</li> </ul>	Twins	"Accelerating Sustainability: Harnessing the Power of AMD	
			Centre, Australia			17:45-17:50		by Mr Raghu Nambiar, Corporate Vice President, Silicon Design Engineering, AMD	
		"LUM	16:35-16:50 - sustainable supercomputing in Finland"			Updates on Fugaku Call for Proposal	ls	17:40-18:00	
	1	by Dr Kimmo Koski, Chief Executive Officer, CSC – IT Center for Science, Finland 18:50-17:05				17:50-17:55 Open Research Innovation Platform (Ol	RIP)	Semidynamics Technology Services "Efficient HPC using RISC-V vectors"	
1						A funded research opportunity in partnership with E Laboratories (DSO)	OSO National	by Dr Roger Espasa, CEO, Semidynamics Technology Services	
			16:50-17:05			1			
			16:50-17:05  Translating Innovation into Practice"  Wuerthwein, Director, San Diego Supercomputer						
			Wuerthwein, Director, San Diego Supercomputer Center, United States						
		by Dr Frank	Wuerthwein, Director, San Diego Supercomputer Center, United States 17:05-17:20						
		by Dr Frank	Wuerthwein, Director, San Diego Supercomputer Center, United States 17:05-17:20						
		by Dr Frank	Wuerthwein, Director, San Diego Supercomputer Center, United States 17:05-17:20 in Supercomputing and Networking Center" 2dd Kurowski, CTO, Peznan Supercomputing and Wetworking Center, Poland						
		by Dr Frank	Wuerthwein, Director, San Diego Supercomputer Center, United States 17:05-17:20 In Supercomputing and Networking Center* 2dd Kutowski, C. 170, Poznan Supercomputing and Networking Center, Poland Networking Center, Poland Networking Center, Poland Type: 18:00 Panel Session TOPICS						
		by Dr Frani "Pozna by Dr Krzys	Wuerthwein, Director, San Diego Supercomputer Center, United States 17:05-17:20  17:05-17:20  18 Supercomputing and Networking Center* Center						
		by Dr Frani "Pozns by Dr Krzys  - Rising Er	Wuerthwein, Director, San Diego Supercomputer Center, United States 17:05-17:20 In Supercomputing and Networking Center* 2dd Kutowski, C. 170, Poznan Supercomputing and Networking Center, Poland Networking Center, Poland Networking Center, Poland Type: 18:00 Panel Session TOPICS						
		by Dr Frani  *Pozns by Dr Krzys  - Rising Er	Wwertherin, Director, San Dieso Supercomputer Center, United States  17:95-17:20  1 Supercomputing and Networking Center*  off of Center, Poland  17:95-18:40  17						
1600-2000		by Dr Frani  "Pozns by Dr Krzys  - Rising Er Opp	Wuerthwein, Director, San Diese Supercomputer Center, United States 170-51-720  **Supercomputing and Networking Center** 170-51-720  **Supercomputing and Networking Center** 1720-18-00  **Panel Season 172-01-800  **Panel Season 172-01-80						
16:00 – 20:00		by Dr Frani  "Pozns by Dr Krzys  - Rising Er Opp	Wuerthwein, Director, San Diese Supercomputer Centre, United States  17:00-17:20 Transcription Trans	F F					
16 00 – 20 00		by Dr Frani  "Pozns by Dr Krzys  - Rising Er Opp	Wuerthwein, Director, San Diese Supercomputer Centre, United States  17:00-17:20 Transcription Trans	Conference Nets	orking Reception				
18:00 – 20:00		by Dr Frani  "Pozns by Dr Krzys  - Rising Er Opp	Wuerthwein, Director, San Diese Supercomputer Centre, United States  17:00-17:20 Transcription Trans	Conference Nets					

Time / Date				DAY 2					
(in SGT) 08:00 – 09:00 09:00 – 09:30		OL Mar 2022 (Wednesday) Registration Period Baltroom							
		pom 212 & 213	Periotis Baltroom  Keynole Talk  "Singapor into Quantum"  by Prof. Jose Ignacio Latone, Director, Certre for Quantum Technologies, NUS, Singapore						
09:30 - 10:30		P1A 2022		"Simulatio by Dr Tomasz Bednarz	Industry Persary and Al for the Era of Scalable Metaverse and Digital Twins* Director of Strategic Researcher Engagement for APAC and EMEA, NVIDIA				
40.00 44.00	09:30 Keynote Talk: "Principles and S by Prof Torsten Hoefler, Professor of Co	0-10:30 Systems for Al Supercomputing" Imputer Science, ETH Zurich, Switzerland		by Mr Emmanuel Le Roux, Ser	Industry Plansmy "Green for Net Diff Or Green" or Vice President, Nesd of NPC and Quantum, Alox, Big Data and Security Division				
10:30 - 11:00 11:00 - 12:30	Garnet Ballro	oom 212 & 213 SIA 2023		iea Break	Peridot Ballroom				
	11:00 Data Storage, Applica Session Chair: Dr Peng Chen, Researcher, Nat Technolo	0-12:30 ations, and Algorithms ional Institute of Advanced Industrial Science and egy, Japan	Industry Plenary "Solving for IPPC and ATs Sustainability Challenge" by Mr Linan Zinted, Co-founder and Chrief Executive Officer, WEVA						
	"Associative Operator Precedence Parsing: A by Le Li and Kenjiro Taura, T "Fault-Tolerant LOBPCG f- by Meiyue Shao, Fudan University, China;Doss USA;Chao Yang, Lawrence Berkeley National La USA; and Brandon Cook, Lawrence	The University of Tokyo, Japan for Nuclear Cl Calculations" say Oryspayey, Brookhayen National Laboratory.	Industry Plansary  "Leveraging ABPC to accelerate research and development of foundation model"  by Mr Andy Huang, Vice President, Digital Transformation Division, Taiwan Web Service Corporation (ASUS)						
12:30 – 13:30		using Machine Learning" versity, Tokyo, Japan; Yuka Kato, Tokyo Woman's and Takahiro Katagiri, Nagoya University, Japan		by Mr M	Industry Planary "Sustrianability for Supercomputing" Schael Woodare, Chef Technology Officer HPC and AI, HPE				
13:30 - 15:30	Garnet Ballroom 212 & 213 HPC ASIA 2023	Garnet Ballroom 214  Conference on Next Generation Arithmetic	Garnet Ballroom 215  HPC-Quantum Computing Integration	Garnet Ballroom 216  HPC Cybersecurity Workshop	Garnet Ballroom 217	Garnet Ballroom 218  Industry Track  Track Chair: Dr Jemei Zidar	Garnet Ballroom 219 Diversity and Inclusion		
	13:00-15:30 Architecture and Networks Sessession (Lineau, The Architecture and Networks, The Lineau, L	TracChart Prof John Classifiers  13:30:13:06  13:30:13:06  VP Fold John Classifiers And Track Deliversity VP Fold John Classifiers And Track And Track VP Fold John Classifiers And Track And Track VP Charton Disposed 45 Direction, Chief Technology Officer, Kallary 1:40:15:10:15:20 An Arthmeetic Toty Prof Anticona State University VP Fold Anticonal State University VP Fold Anticonal State University	Besalon Track Chair Ped Jave Invado Latorre 13:00-14:00 "Quantum Cond and data of a variety of a variety of the Chair Ped Jave Invador	Co-craminate by NSCC & CSCIS  Opening of IMPC Opening centry Track by Prof Tar In Wise, Old Executive, NSCC  13.50-14.01  Interview of the Company of the Company Transition to Quantum Safe Computing* by Mr Abstrack Sings, Scenary Engineer Manager, Senger Condition Transition to Quantum Safe Computing* by Mr Abstrack Sings, Scenary Engineer Manager, Senger Condition Transition Safe Computing The Company Transition Safe Company Transiti	and EU-ASEAN Japan Symposium Track Chair. Dr Fabrico Gagland Track Chair. Dr Fabrico Gagland Welcome and Introduction to the EU- Welcome and EU- Welcome EU- Welco	Final Cultur of Jenner Justine Transcription of Transcrip	Track Co-Chair M Mark Stocket, Mr. Add Suchramanya 13:30 - 14:00 "The at of Maining Independently by Dr. Lingme, Group Leaders Laboratory of Womer's Health & Genetics, Genome Institute of Braugone (GIS), A 'STAR ' "Toma "Start Mark Genetics, Genome Institute of Braugone (GIS), A 'STAR ' "Toma "Start Company (GIS), A 'STAR ' "Toma "Start Company (GIS) of the Company, anyone can make a difference" (AM Countrium Competers (AM Countrium Competers (AM Countrium Competers ) "A 'Science over story of the Country over Y ' "Action over story over A ' "Action over story over A' "Action over story over A' "Action over story over A' "A ' "Action over story over A' "A ' "Action over story over A' "A ' "		
					by H.E. Satvinder Singh, Deputy Secretary- General for ASEAN Economic Community (AEC) Department, ASEAN Secretariat 15:25-16:25				
15:30 - 16:00 16:00 - 18:00	Garnet Ballroom 212 & 213	Tea E	Garnet Ballroom 215	Garnet Ballroom 216	Moderated Panel "Status EU-ASEAN- Japan Partnership on HPC"	Moderated Panel  Astus EU-ASEAN - Japan Partnership on HPC*  Garnet Ballroom 218 Garnet			
18:00 - 20:00	HPC ASIA 2023  16:00 – 17:00  Parel Moder Beatinus Microdio, Professor of Tacaly of Senerce and Tachnology, Road University, RIGH Center for Computational Science, Japan Parel Modern Science and Tachnology, Road University, RIGHS Center for Computational Science, Japan Parel Science, Japan Microdio, Professor of Tacal for Computer Architecture and Parella Science, Lebrus Superconnounce, Center, Germany Port Marin Science, Professor of Chair for Computer Architecture and Parella Science, Lebrus Superconnounce, Center, Germany Anderson Prof Tacal Homes Professor, Prof	Conference on Next Generation Arithmetic (COMSA) Track Chair. Ped John Gustation Generation Committee Comm		HPC Operace-unity Workshop Co-organized by NGC & CSCIS Co-organized by NGC & CSCIS  "HPC Three & Lindon "HPC Three & Lindon "HPC Three & Lindon Research Lead, Group-B Singapore HQ Desason. Are Today's HPC Environments Salir, Desason. Are Today's HPC Environments Salir, Marken Gloral Power Business Office, Obst Center Facility, Haven Gloral Power Business Abhieved Sings, Security Enriceme Manuscul Abhieved Sin	Moderater, Dr Fachicio Galadieri, The EU- ASEAN-NE School 2022 Direction. ERAD School	Industry Track 1600-1620 SambalNora Systems  *Powering the next wave of All for Gebruse  *Advisors, Professional Services & Gereniske  Croud Services, Asia Pacific, 19FE  **Boddelling macracle earl'  *Powering the Next Wave of All for Gebruse  **Advisors, Professional Services & Gereniske  Croud Services, Next Pacific, 19FE  **Boddelling macracle earl'  *Po (*Chud services, Nev Dissional  **Todo—17.20  **Chud services for mew HPC  **Cehol services for mew HPC	Diversity and behalison Track Co-Chair M Mark Siscelet, Me Add Subramanya Subramanya Colon 16:30 "Diversity Dialogue at Paway: Holding "Diversity Dialogue at Paway: Holding Tolon 16:30 Me Add Subramanya Mandering & Events Office, Paway Spacecroppiding Research Centre 16:30-17:30 Fanel Discussionmanya Facilitate Subramanya Mandering Affects 16:30-17:30 Fanel Discussionmanya Facilitate Subramanya Me Mark Stricket, Assa Prof Yvorne Can, Me Kate Krivin, Di Francesca Tosto		
				18:15-20:00 Wine Party & Networking Session* at TAG * free for HPC Cybersecurity Track registered attendees					

Time / Date			DAY3				
Time / Date (in SGT) 08:00 – 09:00	DAY 3 92 Mar 2023 (Thursday) Registration						
09:00 - 10:30		oom 212 & 213	Peridot Ballroom				
		uting with Quantum @SG Workshop	SCA23 Closing Remarks by Prof Sean Smith, Director, National Computational Infrastructure (NCI), The Australian National University (ANU), Australia [Co-chair of the SCA23 Steering Committee]				
	09:00 Inaugural Keynote: "Future of by Dr Joseph S. Broz, IBM Vice President, Quantum Strategy and 6	l-09:30  f computing with Quantum"  Growth, Thomas J. Watson Research Center, Yorktown Heights, NY	Keyrote "Cuantum Machanice Modelling of Materials for Clean Engray & Sustainable Electronice Solutions"				
		b-10:00 oud quantum computing" ; Centre for Quantum Technologies and TU Crete	by Prof Michaels Spencer, Deputy Director Center for Digital Invovation STEM, RMIT University, Australia  William Commission Commiss				
	10:00 "Quantum computing in by Assoc Prof Ng Hui Khoon, Yale-NUS College and the Cent	b-10:30 In the presence of noise" Iter for Quantum Technologies, National University of Singapore	by Prof Amanda Barnard, Senio	r Professor, Deputy Director, and Computational Science Lead, The Austra Industry Plenary "Accelerating Carbon Neutral Scientific Discoveriee" by Andrew Underwood, APJ Chief Technology Officer, Dell Technologies	nan National University, Australia		
10:30 – 11:00			Tea Break				
11:00 - 12:30		oom 212 & 213		Peridot Ballroom			
		uting with Quantum @SG Workshop	"Tangible Quantum Computing Benefits, Next-Apply Quantum Production Performance" by Dr Georges-Olivier Reymond, Chief Executive Officer, PASOAL "The Mars Generalifolds Parasity" "The Mars Generalifolds Benefit Parasity Parasity" by M Narowick Books, Aury Goldel Blass Bell Director + IPECA Marsot Asia				
	"Techniques to Enhance a QUBO Solver for P by Prof Lau Hoong Chuin, Professor of Computer Science, SMU and	12.00					
	"Dimensionality Reduction in to by Assoc Prof Mile Gu, Group Leader of the Quantum and Comple	the Era of Quantum Computing"  xity Science Initiative, Nanyang Technological University, Singapore  12:30		SCA23 Inaugural SCA Award Winners' Lecture Series Translational Computer Science and it's application to Supercomputin ref David Abramson, Director of Research Computing, University of Queen			
	"Quantum chamietry on ein	b-12:30 mulators and NISQ devices" Computing (IHPC), Agency for Science, Technology and Research (TAR)	by Prid David Abramson, Director of Research Computing, University of Queensland				
12:30 - 13:30	(***		Lunch				
13:30 - 15:30	Garnet Ballroom 212 & 213	Garnet Ballroom 214	Garnet Ballroom 217	Garnet Ballroom 218	Garnet Ballroom 219		
	Future of High Performance Computing with Quantum @SG Workshop	Conference on Next Generation Arithmetic (CoNGA) Track Chair: Prof John Gustafson	Green Data Centre Track Chair: Mr Vincent Lim	Industry Track Track Chair: Dr Jemej Zidar	Mini Global Research Platform (GRP) Workshop Track Co-Chair: Prof Francis Lee Bu Sung, Prof Joe Mambretti, Ms Maxine Brown		
	13:30-14:45  Section 1: Introduction  Introduction, inspiration and motivation for Quantum  Introduction to IBM Quantum and Quantum Tools (Quantum	13:30-14:30  Keynote Talk "Farewell to Floats: A Personal History of the Rise and Fall of IEEE Std 754™  by Prof John Gustatson, Visiting Scholar, Arizona State University	13:30-14:00 "NUS NSCC I4.0 DC A Tropical Supercomputing DC" by Mr Vincent Lim, Deputy Director DC (Operations/Projects), National Supercomputing Centre (NSCC) Singapore	13:30-13:50 Atos "Advanced computing technologies paving the way towards the virtual human"	13:30-13:35 Introduction To Mini-GRP Workshop by AProf Francis Lee, Secretary of SingAREN		
	Composer, Quantum Lab, Qiskit Runtime, Quantum serverless)	14:20 15:00	14:00-14:30	by Dr Okba Hamitou, HPC Senior Technical Expert, Atos, HPC Division*	13:35-13:45		
	14:45-15:00 Short Break	"PHAc: Posit Hardware Accelerator for Efficient Arithmetic Logic Operations" by Ms Diksha Shekhawar, Ph.D. Scholar, Academy of Scientific and Innovative Research (AcSIR), CSIR-Central Electronics Engineering Research Institute (CEER), Plaini	Women in data centres: a fireside chat	40.50.4440	SDSC-SingAREN MOU Signing Ceremony		
	15:00-16:00	by Ms Diksha Shekhawat, Ph.D. Scholar, Academy of Scientific and Innovative Research (AcSIR), CSIR-Central Electronics	Panellists: Ms Soh Lay Khuan, Head of Carrier, One-Qode, Ms Nimisha Tailor, Competition & Regulation Specialist Ms Carmen Chan, Vice President, Global Business Development, NOVA Global, Ms Tejawani Tilak, VP Marketing, APAC, Digtal	13:30-14:10 Microsoft "Unlock the Potential of Public Cloud with AMD for HPC	13:45-14:20 Keynote Talk "The Next 10 Years of NRP"		
	Section 2: Intermediate basics and handson with Qiskit  - Basics of quantum computational principles with Quantum  Primitives		Tailor, Competition & Regulation Specialist Ms Carmen Chan, Vice President, Global Business Development,	workloads** by Mr Paul Skaria, Regional Lead, HPC & Cloud – APJ, AMD (Microsoft)	by Dr Frank Wuerthwein, Director, San Diego Supercomputer Center		
	- Basics and overview of Near term quantum algorithms - In-	15:00-15:30  "Fused Three-Input SORN Arithmetic" by Mr Moritz Bärthel, Research Associate and PhD candidate, University of Bremen	NOVA Global, Ms Tejaswini Tilak, VP Marketing, APAC, Digital Realty	14:10-14:20	14:20-14:40 "The Asia Pacific Research Platform in APAN & KRP: An		
	depth on VQE  VQE with Qiskit Application modules: Qiskit Machine Learning	University of Bremen	14:30-14:40 Break	Google Cloud  "HPC best practices for the most demanding workloads on Google	Overview"  by Dr Jeonghoon Moon, Principal Researcher, Korea Institute of Science and Technology Information (KISTI)		
			14:40-15:20	by Mr Injae Kwak, HPC Practice Lead, Asia Pacific, Google			
			Panel Discussion  Moderator: Mr Joshua Au, Chief Technology Officer, Data Centre	Cloud*	14:40-15:00 "The Global Research Platform: An Overview"		
			Facility, Huawei Digital Power Business	14:30-14:50 PASQAL	"The Global Research Platform: An Overview" by Prof Joe Mambretti, Director, International Center for Advanced Internet Research, Northwestern University		
			Panellist: Prof Wen Yonggang, Professor & President's Chair, School of Computer Science and Engineering, Associate Dean (Research)	"Solving industry-relevant optimization problems with neutral atoms-based quantum computers" by Dr Wesley Coelho, Quantum Applications Engineer, PASQAL"	15:00-15:20 "SingAREN Open Exchange and GRP"		
			Prior vent l'origiang, i-folessor à retaileir s Chair, Scriolo or Computer Science and Enriquenine, Associate Dean (Research), College of Engineering, Nanyang Technological University, Singapore, McChak Lee Meng, Co-founder, CodestDC, Mrr Ashton Sch, Co-chair, DC Committee, SGTECH, Mr Rathish Mari, Director, Datacenter Operations, Digital Reality	14:50-15:10	by A/Prof Francis Lee, Secretary of SingAREN		
			Ashton Sch, Co-chair, DC Committee, SGTECH, Mr Rathish Mani, Director, Datacenter Operations, Digital Realty	"ASUS "AI for Video Analytics & Its Applications and Architecture" by Ms Jane Shen Shengmei, Chief Scientist, Pensees Systems Pte Ltd (ASUS)	15:20-15:40  "Australia Research Platform and the SKA" by Mr Andrew Howard, Associate Director Cloud Services, National Computational Infrastructure (NCI), Canberra Australia		
				15:10-15:30			
				Run Al Labs "Build an Enterprise-Class Al Infrastructure with Run:ai			
				by Mr Nir Lubliner, Senior Director of Sales and BD APAC, Run:Al			
			15:20-15:50 "Data Centre Sustainability and Greenhouse Gas Abatements"				
15:30 - 16:00	Tea	Break	by Mr Lee Seng Wee, Director, i3 Solutions Group & i3 Critical	s Group & 13 Critical Tea Break			
			Facilities 15:50-16:00				
16:00 – 18:00	Garnet Ballroom 212 & 213	Garnet Ballroom 214	Break	Garnet Ballroom 218	Garnet Ballroom 219		
10.00 = 10.00	Future of High Performance Computing with Quantum @SG	Conference on Next Generation Arithmetic (CoNGA) Track Chair: Prof John Gustafson	16:00-16:30  "Airbitat Sustainable Data Centre Cooling Solution" by Dr Li Fuyun, Head, Sustainable Cooling, Urban Solutions, ST	Industry Track Track Chair: Dr Jernej Zidar	Mini Global Research Platform (GRP) Workshop		
	Workshop 18:00-17:00		Engineering	Track Chair: Dr Jemej Zidar 16:00-16:20	16:00-16:20 "KAUST Undate for AutoGOLF"		
	16:00-17:00  Section 3: Quantum Services on Cloud and HPC Integration  — Qiskit Runtime and Error Mitigation on Qiskit Runtime	16:00 – 16:30 "Towards a Better 16-Bit Number Representation for Training Neural Networks"	16:30-17:00 "KoolLogix: A paradigm-shifting heat removal solution for	DELL "Energy Efficient Supercomputing to Drive Global Research" by Mr Romain Bottier, HPC & Al Subject Matter Expert, Dell	"KAUST Update for AutoGOLE" by Mr Alex Moura, Senior Network Engineer, KAUST		
	<ul> <li>Circuit cutting and Entanglement forging with Quantum Serverless</li> </ul>	by Dr Himeshi De Silva, Scientist, Institute for Infocomm Research Agency for Science Technology and Research	"KoolLogix: A paradigm-shifting heat removal solution for data centers that furthers sustainability" by Dr Seri Lee, Chief Technology Officer, KoolLogix Pte Ltd	by Mr Romain Bottler, HPC & Al Subject Matter Expert, Dell Technologies	16:20-16:40 "Evolution of ESnet - A Changing Landscape in Scientific		
		Singapore 16:30 – 17:00	17:00-17:10 Break	16:20-16:40	"Evolution of ESnet – A Changing Landscape in Scientific Networking" by Mr Guok Chin Peng, CTO, ESnet		
		"Improving the Stability of Kalman Filters with Posit	17:10-17:40	DDN "New Data Driven Storage Architecture for HPC, Al and Private Cloud"			
		arithmetic" by Mr Vinay Shankar Saxena, Research Specialist, Bosch Global Software Technologies Pvt. Ltd.	17:10-17:40  "Making Green Data Centre a Reality" by Mr Wandrille Doucerain, Head, Business Development Data Centre, ENGIE South East Asia	Private Cloud** by Mr Atul Vidwansa, General Manager, India & ASEAN, DDN Storage, DataDirect Networks*	16:40-17:00  "NICT's Integrated Testbed"  by Dr Hidehias Nagano, Director, ICT Testbed Research, Development and Operations Laboratory, National Institute of Information and Communications Technology (NICT)		
		17:00 – 17:30 "Evaluation of the use of Low Practicion Floating Print	17.40 17.45	16:40-17:00 WFKA			
		17:00 – 17:20  "Evaluation of the use of Low Precision Floating-Point Arithmetic for Applications in Radio Astronomy" by Dr Thushan K. Gunardren, Research Council Officer – Signal Processing, Herzberg Astronomy and Astrophysics Research Council Clanads	Closing by Mr Vincent Lim, Deputy Director DC (Operations/Projects), National Supercomputing Centre (NSCC) Singapore	18:40-17:00 WEKA "Why a Hybrid Cloud Data Platform Architecture is Critical for Next-Generation HPC Research?" by Ms Barbara Murphy, VP Cloud Strategy, WEKA	17:00-17:20  "SCinet, NRE Program, and OFCnet" by Mr Rodney Wilson, Chief Technologist, External Research, Ciena Corporation, R&D Labe, Ottawa Canada		
				17:00-17:20	17:20-17:40		
		17:30 – 18:00  "PLAUs: Posit Logarithmic Approximate Units to Implement Low-Cost Operations with Real Numbers" by Mr Raul Muillio, PhD, Student, Complutense University of Madrid, Spain		DELL  "Architecting a sustainable Supercomputer" by Mr Romain Bottier, HPC & Al Subject Matter Expert, Dell Technologies	"Accelerated ONION based on DTN experience" by Dr Susumu Date, Associate Professor of the Cybermedia Center, Osaka University		
		Madrid, Spain		recuriouges	17:40-18:00 "Supporting International Partnerships in Science: The Role		
					"Supporting International Partnerships in Science: The Role of International Networks at Indiana University" by Ms Brenna Meade, Network Engineer, International Networks at Indiana University		
					18:00-18:10 Closing Remarks by A/Prof Francis Lee, Secretary of SingAREN		
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