Monday

Time	Speaker	Title	Authors	Category
8.45 - 9.00	Registration	-	-	-
9.00 - 9.10	Welcome	Dorte Juul Jensen	-	-
9.10 - 10.00	Matteo Seita	Assessing and controlling microstructure heterogeneity in fusion-based additive manufacturing	-	Keynote
10.00 - 10.20	Xiaobo Wang	Multiscale characterization of the additive-manufacturing-induced cell structure in 316L stainless steel: A comparative study	X. Wang, V. K. Nadimpalli, D. Juul Jensen, T. Yu	Contributed
10.20 - 10.50	Zhenbo Zhang	Multiscale materials architecting by additive manufacturing: novel structures and mechanical properties	-	Invited
10.50 - 11.20	Coffee break	-	-	-
11.20 - 11.50	Jörg Jinscheck	Investigation of the effect of AM process conditions on the local microstructure using (in-situ) electron microscopy	-	Invited
11.50 - 12.10	Marion Defer	Characterization of Si particles in Additively Manufactured AlSi10Mg using synchrotron transmission X-ray nanotomography	Defer M., Dasgupta S., Shahani A.J., Xiao X., Juul Jensen D., Zhang Y.B.	Contributed

12.10 - 12.30	Kenta Yamanaka	Neutron diffraction analysis of microstructural evolution and mechanical behavior in an additively manufactured multiphase alloy	Kenta Yamanaka, Manami Mori, Yusuke Onuki, Shigeo Sato	Contributed
12.30 - 12.50	Dasom Kim	Mechanical inhomogeneity of melt-pool structure in additive manufactured Al alloy: micropillar compression test approach	Dasom Kim, Akihiro Choshi, Naoki Takata, Asuka Suzuki, Makoto Kobashi	Contributed
12.50 - 13.45	Lunch	-	-	-
13.45 - 14.35	Manas Upadhyay	Dislocation structure evolution during metal additive manufacturing	Manas Upadhyay, Steve Gaudez, Wolfgang Pantleon	Keynote
14.35 - 14.55	Matthew Schreiber	The effect of processing parameters on dislocation density and tensile properties in laser beam powder bed fusion 316L	Matthew Schreiber, Joy Gockel, Craig Brice	Contributed
14.55 - 15.25	Mark Taylor	In-Situ EBSD study of austenitisation in a wire-arc additively manufactured high-strength steel	Mark Taylor, Dr Yahya Hoque Mozumder, Albert Duncan Smith, Alec E Davis, Fabio Scenini, Philip B Prangnell, Ed Pickering	Invited
15.25-15.45	Yubin Zhang	Challenges in characterizing additively manufactured AlSi10Mg using X-ray Laue micro-beam diffraction	-	Contributed
16.00	Departure from Risø	Social arrangement incl. dinner in Roskilde		

Tuesday

Time	Speaker	Title	Authors	Category
9.00 - 9.50	Peter Mayr	The Metallurgy of Additive Manufacturing: Potentials and Challenges towards Industrialisation	Peter Mayr, Evgeniya Kabliman, Simon Rauh, Graham Matheson, Stefan Rotzsche, Sebastian Hartmann	Keynote
9.50 - 10.10	Yue Cheng	Inhomogeneous deformation in melt-pool structure of Al-Fe-Cu alloy manufactured by laser powder bed fusion	Yue Cheng, Yuki Otani, Naoki Takata, Asuka Suzuki, Makoto Kobashi and Masaki Kato	Contributed
10.10 - 10.30	Knut Marthinsen	Additive Manufacturing of 7xxx Aluminium Alloys by Laser Powder Bed Fusion	Kai Zhang, Sigurd Wenner, Calin D. Marioara, Even W Hovig, Qiang Du, Morten Onsøien, Knut Marthinsen	Contributed
10.30 - 10.50	Qi Chao	On the inhomogeneous microstructure and mechanical properties of an AA6060 alloy manufactured by additive friction stir deposition	Qi Chao, Jinbiao Qian, Xinliang Xie, Rengeng Li and Guohua Fan	Contributed
10.50 - 11.20	Coffee break	Group photo	-	-
11.20 - 11.50	Dagny Primdahl	Metal Binder Jetting – Perspectives on quality control	-	Invited
11.50 - 12.10	Jette Oddershede	Applying lab-based DCT to reveal and quantify the 3D grain structure of a miniature chess rook produced by binder jetting	Jun Sun, Florian Bachmann, Jette Oddershede, Erik Lauridsen	Contributed

12.10 - 12.30	Moritz Zwicker	Integration of spray-formed AISI H13 overspray powder in additive manufacturing to enable a circular ecosystem	Moritz Zwicker, Niels Skat Tiedje, Venkata Karthik Nadimpalli, Thomas Hou Dahmen	Contributed
12.30 - 12.50	Mohammad Saleh Kenevisi	Processability of K340 cold work tool steel by directed energy deposition technique	Mohammad Saleh Kenevisi, Pietro Antonio Martelli, Federico Simone Gobber, Daniele Ugues, Sara Biamino	Contributed
12.50 - 13.45	Lunch	-	-	-
13.45 - 14.15	Olga Zinovieva	Large-scale microstructure modelling of an additively manufactured part using cellular automata	Olga Zinovieva, Aleksandr Zinoviev, Ozkan Gokcekaya, Yunlong Tang	Invited
14.15 - 14.35	Wayne E. Alphonso	Elucidating the impact of laser beam shape on the as-printed microstructure in 316L stainless steel	Wayne E. Alphonso, Mohamad Bayat, Richard Rothfelder, Michael Schmidt, Dorte Juul Jensen, Jesper H. Hattel	Contributed
14.35 - 15.05	Yanjun Li	Modelling the grain structure development during wire and arc additive manufacturing of steels with inoculation	Yijiang Xu, Yanjun li	Invited
15.05 - 15.35	Coffee break			
15.35 - 16.05	Shingo Katayama	Additive manufacturing to design a new material TiB2-reinfoced SUS316L using TiB2-Fe composite powder	Shingo Katayama, Takahiko Kikuchi, Takafumi Yamamoto, 亮 大塚	Invited
16.05 - 16.25	Shuo Sun	Synthesis and characterization of the dealloyed hierarchical structure of AlSi10Mg-Cu alloys prepared using selective laser melting	Shuo Sun, Chengfeng Zhang, Weiyi Wang, Andy Godrey	Contributed
16.25 - 17.15	Lyle Levine	Building microstructures by welding millions of little bits	Lyle Levine, Edwin J Schwalbach,	Keynote

		of metals together: measurement approaches, model validation, and post-build processing	Fan Zhang	

Wednesday

Time	Speaker	Title	Authors	Category
9.00 - 9.50	Joy Gockel	Processing Parameter and Machine Platform Influence on Microstructure in Laser Powder Bed Fusion Additive Manufacturing	-	Keynote
9.50 - 10.10	Mohammad Malekan	Micro-macro relationship between microstructure and mechanical behavior of 316L stainless steel fabricated using L-PBF additive manufacturing	Cansin Ozdogan, Rasid Ahmed Yildiz, Mohammad Malekan	Contributed
10.10 - 10.30	Adithya Kalliath	Influence of printing parameters on part density in L-BPF of Ti-6Al-4V and correlation with static mechanical properties measured using indentation testing	J Schulz, E C Santos, A Kalliath, B Schmaling, P Zok, S Siegert, I S Dandu, KH Lindner, E Bruder and K Durst	Contributed
10.30 - 10.50	Alexandru Sorea	Improved corrosion resistance of powder manufactured AISI 904L parts by hot isostatic pressing post treatment	A Sorea, P Valler, P Kjeldsteen, P Hjelmeborn	Contributed
10.50 - 11.20	Coffee break	-	-	-
11.20 - 11.50	Frank Adjei-Kyeremeh	Characterisation of T1 (Al2CuLi) Precipitates in Conventional (2099-T83) and Laser Additive Manufactured (PBF-LB/M, DED-LB/M) Microstructures	Adjei-Kyeremeh, F., Raffeis I., and Bührig-Polaczek, A.	Invited

11.50 - 12.10	Huayue Zhang	Microstructure Evolution and Precipitation Strengthening Behaviour of Additively Manufactured High-speed Steels	Huayue Zhang, Diego Alba Venerod, Andaç Özsoy, Gowtham Soundarapandiyan, Paul A.J. Bagot, Stuart Robertson, Xuan Zhang, Jun-Sang Park, Steven Van Petegem, Michael P. Moody, Bo Chen	Contributed
12.10 - 12.30	Jayant Barode	Effect of hot isostatic pressing on the microstructure of laser powder bed fused A20X alloy	Jayant Barode, Emilio Bassini, Alberta Aversa, Diego Manfredi, Daniele Ugues, Sara Biamino, Mariangela Lombardi, and Paolo Fino"	Contributed
12.30 - 12.50	Naoki Takata	Design of Al-Fe based alloys strengthened by Al6M metastable phase formed in laser powder bed fusion	Naoki Takata, Wenyuan Wang, Yue Cheng, Takanobu Miyawaki, Asuka Suzuki, Makoto Kobashi and Masaki Kato	Contributed
12.50 - 13.45	Lunch	-	-	-
13.45 - 14.35	Venkata Karthik Nadimpalli & Tianbo Yu	Material and Microstructure evolution in laser-based powder bed fusion of metals	Venkata Karthik Nadimpalli, Tianbo Yu	Keynote
14.35 - 14.55	Kameshwaran Swaminathan	Effect of solution treatment temperature on recrystallisation behaviour of Haynes 282 manufactured through laser powder bed fusion	Kameshwaran Swaminathan and Joel Andersson	Contributed
14.55 - 15.15	Chunlei Zhang	Recrystallization kinetics in 3D printed 316L stainless steel	C Zhang, D Juul Jensen, T Yu	Contributed
15.15 - 15.45	Coffee break	-	-	-
15.45 - 16.15	Andy Godfrey	Influence of print-chamber oxygen content on the	-	Invited

		microstructure and properties of SLM-printed 316L		
16.15 - 16.35	Zhaowei Wang	Cracking Mechanism in E-Beam 3D-Printed DZ125 Ni-based Superalloys	Zhaowei Wang, Yian Lin, Yizhou Zhao, Feier Shangguan, Kai Chen	Contributed
16.35 - 16.55	Ali Gholinia	Understanding fatigue crack propagation pathways in Additively Manufactured AlSi10Mg	Sethupathi Rangaraj, Saad Syed Iqbal Ahmed, Alec Davis, P J Withers, Ali Gholinia	Contributed
16.55-17.15	Przemysław Snopiński	Effect of multi-pass shot peening on the microstructure of LPBF AlSi10Mg alloy	Przemysław Snopiński, Tianbo Yu, Xiaodan Zhang, Dorte Juul Jensen	Contributed

Thursday

Time	Speaker	Title	Authors	Category
9.00 - 9.50	Takayoshi Nakano	Control of crystallographic textures by metal additive manufacturing—A review	-	Keynote
9.50 - 10.10	Ali Gholinia	Grain size assessment using EBSD on heterogeneous additively manufactured microstructures	Jacopo del Gaudio, Jack Donoghue, Philip Withers, Ken Mingard, Mark Gee, Alistair Garner, Ali Gholinia	Contributed
10.10 - 10.30	Jiaqiang Chang	Effect of microstructural heterogeneity and grain morphology on the recrystallization of additively manufactured titanium alloy	Jiaqiang Chang, Yingna Wu, Zhenbo Zhang	Contributed
10.30 - 10.50	Hangyu Yue	Effect of Y2O3 addition on the mechanical properties of Ti-48Al-2Cr-2Nb alloy produced by selective electron beam melting	Hangyu Yue, Hui Peng, Kesong Miao, Xinliang Xie, Qi Chao, Guohua Fan	Contributed
10.50 - 11.20	Coffee break	-	-	-
11.20 - 11.50	Wolfgang Pantleon	Microstructure of additive manufactured materials for plasma-facing components of future fusion reactors	Daniel Ahlin Heikkinen Wartacz, Wolfgang Pantleon, Hanka Becker, Steffen Antusch, Nerea Ordas, Carsten Gundlach, Oleg V Mishin	Invited
11.50 - 12.10	Anter El-Azab	Revisiting the Theory of Spinodal Strengthening: Implications for	Anter El-Azab, Yash Pachaury	Contributed

		Inhomogeneous Additive and Irradiated Structural Alloys		
12.10 - 12.30	Zhihao Pan	Microstructural characterization of AISI 440C stainless tool steel fabricated by laser powder bed fusion	Zhihao Pan, Dorte Juul Jensen, Venkata Karthik Nadimpalli	Contributed
12.30-12.50	Xinliang Xie	Enhanced mechanical properties of the additively manufactured IN738LC superalloy through thermal history management during the laser powder bed fusion process	Xinliang Xie, Xiaopeng Yan, Qi Chao, Guohua Fan	Contributed
12.50-13.45	Lunch			
13.45-14.35	Kai Chen	Effects of Induction Heating on the Microstructure and Mechanical Properties of Laser 3D-Printing Repaired DZ125L Superalloy	Yao Li, Zhaowei Wang, Kai Chen and Weifeng He	Keynote
14.35-14.55	Gideon Crawford	Influence of As-Built Microstructure on Heat Treatment Response of Laser Powder Bed Fusion Nickel Superalloy 718 for Model Validation		Contributed
15.00	Departure from Risø	Social arrangement and dinner in Copenhagen		

Friday

Time	Speaker	Title	Authors	Category
9.00-9.50	Anthony D. Rollett	Optical Microscopy on Machined Surfaces in Ti-6Al-4V Reveals Pore Statistics that Correlate with Fatigue	Je Choi, Kevin Zhou, Evan Adcock, Joe Pauza, Austin Ngo, Tomasz Swierzewski, John Lewandowski, Sneha Narra, Anthony D. Rollett	Keynote
9.50 - 10.10	Dongchen Hu	On the chemical composition, microstructure and mechanical properties of a Nitrogen-contaminated Ti-6Al-4V component built by Wire-Arc Additive Manufacturing	Dongchen Hu, Romali Biswal, Vivek Sahu, Jonathan Fellowes, Amirhosein Zadehkabir, Stewart Williams, Alec E. Davis	Contributed
10.10 - 10.30	Jingyuan Shen	Exploring the feasibility of preparing Ti/Ti6Al4V composites by laser powder bed fusion	J Shen, Z Pan, V K Nadimpalli and T Yu	Contributed
10.30 - 10.50	Hanqing Che	Cold spray - a solid-state additive manufacturing technology	Congcong Su, Yan Wang, Hanqing Che, Stephen Yue, Xiaoxu Huang	Contributed
10.50 - 11.20	Coffee break	-	-	-
11.20 - 11.50	Sankhya Mohanty	Hybrid digital twins of additive manufacturing combining simulations and machine learning methods	-	Invited
11.50 - 12.10	Xiaopeng Li	An Image-Driven Machine Learning method for Microstructure	Zhuohan Cao, Yi Liu, Jamie Joseph Kruzic, Xiaopeng Li	Contributed
12.10 - 12.40	Ciprian Cimpan	Advantages of Additive manufacturing based on Life Cycle Assessment studies	-	Invited

12.40-12.50	Closing remarks	Dorte Juul Jensen		