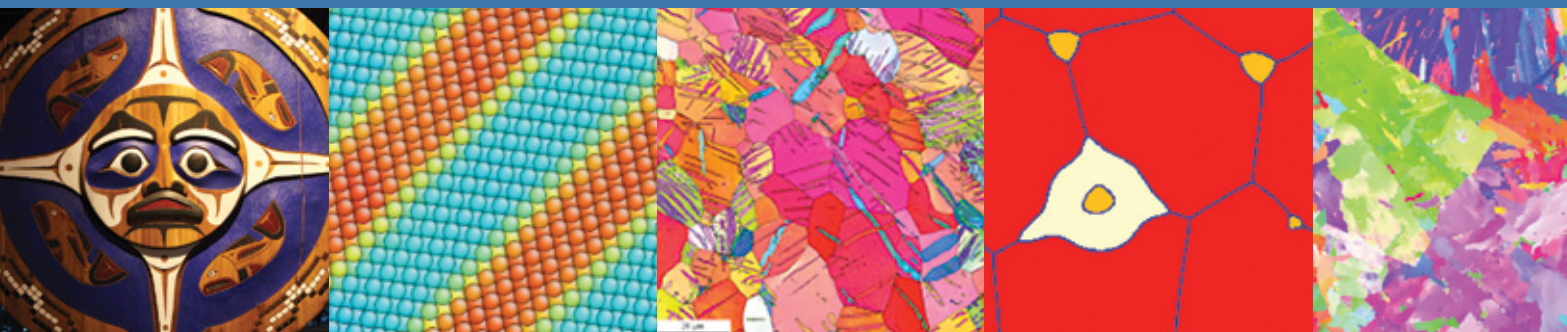


PROGRAM AT A GLANCE



Solid-Solid Phase Transformations in Inorganic Materials

JUNE 28 – JULY 3, 2015 | WHISTLER, BC, CANADA



WWW.PTM2015.ORG

Program at a Glance

- Advances in Experimental Techniques
- Advances in Modelling and Simulation
- Diffusional Transformations
- Displacive Transformations
- Emerging Areas
- Industrial Applications
- Plenary Sessions

		ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
MONDAY 29 JUNE 2015	08:15–8:30	Opening Ceremony			
	08:30–9:30	Plenary Session 1: John Ågren: Nucleation – a challenge in the modelling of phase transformations (Emerald Ballroom)			
	09:30–10:00	COFFEE BREAK - ROOM: ALPINE FOYER			
	10:00–11:30	1A: Phase Transformations in Steels: Austenite-Ferrite I	1B: Ab-initio Simulations	1C: Atomistic Characterization	1D: Additive Manufacturing of Metals
	11:30–11:45	BREAK			
	11:45–13:00	2A: Phase Transformations in Steels: Austenite-Ferrite II	2B: Atomistic Simulations of Interfaces	2C: Transmission Electron Microscopy	2D: Microstructure - Property Relationships
	13:00–14:00	LUNCH - ROOM: EMERALD FOYER AND GRILL & VINE RESTAURANT			
	14:00–15:15	3A: Pearlite	3B: Interfaces	3C: Microstructure Characterization in Steels	3D: Non-Ferrous Alloys
	15:15–15:30	COFFEE BREAK - ROOM: ALPINE FOYER			
	15:30–16:45	4A: Bainite	4B: Bridging from Atomistic Simulations	4C: In-situ Techniques I	4D: TRIP Materials
	16:45–17:00	BREAK			
	17:00–18:00	Plenary Session 2: Tadashi Furuhashi: Importance of phase transformations in development of modern high strength steels (Emerald Ballroom)			
	18:30–20:30	WELCOME RECEPTION AT THE SQUAMISH LIL'WAT CULTURAL CENTRE 4584 Blackcomb Way, Whistler, BC V0N 1B4			

		ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
TUESDAY 30 JUNE 2015	08:30–09:30	Plenary Session 3: Sybrand van der Zwaag: The dominant role of interface composition on the austenite-ferrite transformation behaviour at high and low temperatures (Emerald Ballroom)			
	09:30–09:45	BREAK			
	09:45–11:15	5A: Precipitation under Non-equilibrium Conditions	5B: Thermodynamics and Alloy Design	5C: In-situ Techniques II	5D: Other Diffusional Transformations
	11:15–11:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	11:45–13:15	6A: Phase Transformations in Complex Steels	6B: Transformation Kinetics	6C: Theory of Displacive Transformations	6D: Ferrous Austenite
	13:15–15:00	LUNCH AND POSTER SESSION - ROOM: ALPINE FOYER			
	15:00–16:15	7A: Mechanisms of Precipitations	7B: Phase Field Modelling I	7C: Crystallography	7D: Ferrous Martensites
	16:15–16:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	16:45–18:15	8A: Precipitation: Early Stages	8B: Phase Field Modelling II	8C: Ferroelectric & Magnetocaloric Materials	8D: Microstructure Development in Steels I
	18:15–18:30	BREAK			
18:30–19:30	Plenary Session 4: Tetsuo Mohri: Cluster Variation Method as a theoretical tool for the study of phase transformation (Emerald Ballroom)				

		ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
WEDNESDAY 1 JULY 2015	08:30–09:30	Plenary Session 5: Yves Brechet: Diffusional phase transformations: Some examples of kinetic coupling and applications in industrial situations (Emerald Ballroom)			
	09:30–09:45	BREAK			
	09:45–11:00	Plenary Session 6: Aaronson Awards Session (Emerald Ballroom)			
	11:00–11:30	COFFEE BREAK - ROOM: ALPINE FOYER			
	11:30–13:30	9A: Austenitization	9B: Phase Transformations in Ceramics and Minerals	9C: Displacive Transformations in Non-Ferrous Alloys	9D: Microstructure Development in Steels II

		ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
THURSDAY 2 JULY 2015	08:30–09:30	Plenary Session 7: George Sawatzky: Importance of atomic scale modeling in describing and predicting properties of solids and interfaces (Emerald Ballroom)			
	09:30–09:45	BREAK			
	09:45–11:15	10A: Carbide Precipitation in Steels	10B: Phase Field Modelling III	10C: Shape Memory Alloys	10D: From Lab to Application
	11:15–11:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	11:45–13:15	11A: Precipitation in Non-Ferrous Alloys: Aluminum Alloys	11B: Simulation of Ordering and Pattern Formation	11C: Characterization of Displacive Transformations in Ferrous Alloys	11D: Order-Disorder Transformations
	13:15–14:15	LUNCH - ROOM: EMERALD FOYER AND GRILL & VINE RESTAURANT			
	14:15–15:45	12A: Coupled Precipitation	12B: Modelling of Precipitation	12C: Martensitic & Bainitic Transformations in Steels I	12D: Microstructure & Alloy Design
	15:45–16:00	COFFEE BREAK - ROOM: ALPINE FOYER			
	16:00–17:30	13A: Precipitation: Crystallography, Morphology and Kinetics	13B: Simulation of Transformation Plasticity	13C: Martensitic & Bainitic Transformations in Steels II	13D: Nanostructures
	17:30–17:45	BREAK			
	17:45–18:45	Plenary Session 8: Hillert-Cahn Lecture: Peter Voorhees: Coarsening of two-phase mixtures: From particles to bicontinuous phases (Emerald Ballroom)			
20:00–22:30	GALA DINNER - EMERALD BALLROOM AT THE WESTIN				

		ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
FRIDAY 3 JULY 2015	08:30–09:30	Plenary Session 9: Elizabeth Holm: Building microstructures from the atoms up: Microstructural science supporting ICME (Emerald Ballroom)			
	09:30–09:45	BREAK			
	09:45–11:15	14A: Phase Transformations in Titanium	14B: Modelling and Experiment	14C: Deformation Induced Transformations in Steels	14D: Novel Processing & Novel Materials I
	11:15–11:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	11:45–13:30	15A: Phase Transformations in Superalloys	15B: Interfaces and Phase Transformations	15C: Spinodal Decomposition	15D: Novel Processing & Novel Materials II

	ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
08:15–08:30	Opening Ceremony			
08:30–09:30	Plenary Session 1: (Emerald Ballroom) John Ågren: Nucleation – a challenge in the modelling of phase transformations			
09:30–10:00	COFFEE BREAK - ROOM: ALPINE FOYER			
	1A: Phase Transformations in Steels: Austenite-Ferrite I Session Chair - Ingo Steinbach	1B: Ab-initio Simulations Session Chair - Brent Fultz	1C: Atomistic Characterization Session Chair - Frederic Danoix	1D: Additive Manufacturing of Metals Session Chair - Adam Farrow
10:00–10:15	Takafumi Amino	Jörg Neugebauer	Nicole Stanford	Sudarsanam Babu
10:15–10:30				
10:30–10:45	Simon Catteau	Dominique Korbmacher	Laure Bourgeois	Yaakov Idell
10:45–11:00	Hironori Kubo	Ying Chen		Eric Jaegle
11:00–11:15	Myriam Dumont	Vsevolod Razumovskiy	Simon Ringer	Niyanth Sridharan
11:15–11:30			Jian Min Zuo	Michael Kirka
11:30–11:45	BREAK			
	2A: Phase Transformations in Steels: Austenite-Ferrite II Session Chair - Annika Borgenstam	2B: Atomistic Simulations of Interfaces Session Chair - Nikolai Zarkevich	2C: Transmission Electron Microscopy Session Chair - Simon Ringer	2D: Microstructure - Property Relationships Session Chair - Yaakov Idell
11:45–12:00	Zhi-Gang Yang	Mark Asta	Colin Ophus	Bruno De Cooman
12:00–12:15				
12:15–12:30	Beatriz Lopez	Oleksandr Kapikranyan	Thomas LaGrange	Toshihiro Hanamura
12:30–12:45	Thomas Dorin	Tegar Wicaksono		Caroline Toffolon-Masclat
12:45–13:00		Aurélien Vattré	Yasukazu Murakami	Daniel Coughlin
13:00–14:00	LUNCH - ROOM: EMERALD FOYER AND GRILL & VINE RESTAURANT			
	3A: Pearlite Session Chair - Ernst Gamsjäger	3B: Interfaces Session Chair - Jeffrey Hoyt	3C: Microstructure Characterization in Steels Session Chair - Laure Bourgeois	3D: Non-Ferrous Alloys Session Chair - Michael Kirka
14:00–14:15	Ingo Steinbach	Jian Han	Goro Miyamoto	Babak Raeisinia
14:15–14:30				
14:30–14:45	María Martín-Aranda	Kevin McReynolds	Toshihiko Teshima	Nicolas Chobaut
14:45–15:00	Nobuo Nakada	Sherri Hadian	Ziyong Hou	Adam Farrow
15:00–15:15	Patrice Chantrenne	Liam Huber	Claire Debreux	Toan Nguyen
15:15–15:30	COFFEE BREAK - ROOM: ALPINE FOYER			
	4A: Bainite Session Chair - Kester Clarke	4B: Bridging from Atomistic Simulations Session Chair - Mark Asta	4C: In-situ Techniques I Session Chair - Nicole Stanford	4D: TRIP Materials Session Chair - Sudarsanam Babu
15:30–15:45	Annika Borgenstam	Jeffrey Hoyt	Brent Fultz	Frédéric Prima
15:45–16:00				
16:00–16:15	Constantinos Goulas	Nikolai Zarkevich	Benjamin Milkereit	Harry Berek
16:15–16:30	Jiaqing Yin	Normand Mousseau	Philipp Schumacher	Xuejun Jin
16:30–16:45	Meriem Ben Haj Slama		Jian-Min Zuo	
16:45–17:00	BREAK			
17:00–18:00	Plenary Session 2: (Emerald Ballroom) Tadashi Furuhashi: Importance of phase transformations in development of modern high strength steels			
18:30–20:30	WELCOME RECEPTION AT THE SQUAMISH LIL'WAT CULTURAL CENTRE 4584 Blackcomb Way, Whistler, BC V0N 1B4			

	ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
08:30–09:30	Plenary Session 3: (Emerald Ballroom) Sybrand Van Der Zwaag: The dominant role of interface composition on the austenite-ferrite transformation behaviour at high and low temperatures			
09:30–09:45	BREAK			
	5A: Precipitation Under Non-equilibrium Conditions Session Chair - Hélio Goldenstein	5B: Thermodynamics and Alloy Design Session Chair - Christophe Sigli	5C: In-situ Techniques II Session Chair - Goro Miyamoto	5D: Other Diffusional Transformations Session Chair - Mikko Haataja
09:45–10:00	Setsuo Takaki	Wei Xu	Alexis Deschamps	Rajarshi Banerjee
10:00–10:15				Rajarshi Banerjee
10:15–10:30	Ernst Gamsjäger	Isaac Toda-Caraballo	Antonio Ramirez	Christian Schimpf
10:30–10:45	Ben Lawrence	Ursula Kattner	Keiji Ueda	Mark Aindow
10:45–11:00	Andreas Keplinger	Oleg Shchyglo	Ata Kamyabi-Gol	Masanori Kajihara
11:00–11:15	Thomas Philippe	Dmitry Vasilyev		
11:15–11:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	6A: Phase Transformations in Complex Steels Session Chair - Daniel Coughlin	6B: Transformation Kinetics Session Chair - Ursula Kattner	6C: Theory of Displacive Transformations Session Chair - Daniel Schwartz	6D: Ferrous Austenite Session Chair - Masato Enomoto
11:45–12:00	Arthur Nishikawa	Bastian Rheingans	Jian Wang	Jose Rodriguez-Ibabe
12:00–12:15	André Melado			
12:15–12:30	Dean Pierce	Christophe Sigli	Yu Wang	Haiwen Luo
12:30–12:45	Stephanie Sackl	Huajing Song		Fateh Fazeli
12:45–13:00	Carola Celada Casero	Xiaoqin Ou	Yunzhi Wang	Yunbo Xu
13:00–13:15	Mahmoud Saied	Rafal Abdank-Kozubski		Julian Escobar
13:15–15:00	LUNCH AND POSTER SESSION - ROOM: ALPINE FOYER			
	7A: Mechanisms of Precipitations Session Chair - Alexis Deschamps	7B: Phase Field Modelling I Session Chair - Ken Elder	7C: Crystallography Session Chair - Jian Wang	7D: Ferrous Martensites Session Chair - Eugen Rabkin
15:00–15:15	David Seidman	Markus Apel	Cyril Cayron	Amy Clarke
15:15–15:30				
15:30–15:45	Catherine Tassin	Thomas Barkar	Hossein Beladi	Sylvain Dépinoy
15:45–16:00	Andreas Leineweber	Ramanarayan Hariharaputran	Shoichi Nambu	Qi Lu
16:00–16:15	Arijit Roy	Ze nan Yang	Yuzo Kawamoto	Christopher Hutchinson
16:15–16:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	8A: Precipitation: Early Stages Session Chair - David Seidman	8B: Phase Field Modelling II Session Chair - Alphonse Finel	8C: Ferroelectric & Magnetocaloric Materials Session Chair - Jeremy Mitchell	8D: Microstructure Development in Steels I Session Chair - Peter Hodgson
16:45–17:00	Jilt Sietsma	Toshiyuki Koyama	Xiaoqin Ke	Artem Arlazarov
17:00–17:15				
17:15–17:30	Rian Dippenaar	Yuhki Tsukada	Dong Wang	Singong Kang
17:30–17:45	Guma Yeli	Yongmei Jin	Anne-Sophie Kalbfleisch	Farideh Hajy Akbary
17:45–18:00	Sophie Primig	Victor Lopez-Hirata	Donald Brown	Roumen Petrov
18:00–18:15	Aurelie Gentils			Fateh Fazeli
18:15–18:30	BREAK			
18:30–19:30	Plenary Session 4: (Emerald Ballroom) Tetsuo Mohri: Cluster Variation Method as a theoretical tool for the study of phase transformation			

	ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
08:30–09:30	Plenary Session 5: (Emerald Ballroom) Yves Brechet: Diffusional phase transformations: some examples of kinetic coupling and applications in industrial situations			
09:30–09:45	BREAK Plenary Session 6: (Emerald Ballroom) Aaronson Awards Session			
09:45–10:00	Hao Chen			
10:00–10:15	Dor Amram			
10:15–10:30	Rongpei Shi			
10:30–10:45	Hugo Van Landeghem			
10:45–11:00	Yufeng Zheng			
11:00–11:30	COFFEE BREAK - ROOM: ALPINE FOYER			
	9A: Austenitization Session Chairs - Jer-Ren Yang & Setsuo Takaki	9B: Phase Transformations in Ceramics and Minerals Session Chairs - Jilt Sietsma & Eric Lass	9C: Displacive Transformations in Non-Ferrous Alloys Session Chairs - Yu Wang & Yunzhi Wang	9D: Microstructure Development in Steels II Session Chairs - Eric Jaegle & Amy Clarke
11:30–11:45	Kester Clarke	Waltraud Kriven	Elena Pereloma	Peter Hodgson
11:45–12:00				
12:00–12:15	Benoît Denand	Taoran Ma	Matthieu Marteleur	Jennifer Reichert
12:15–12:30	Marina Gruber	Kevin Seymour	Donald Brown	Doug Boyd
12:30–12:45	Koutarou Hayashi	Rainer Abart	Jeremy Mitchell	Yongchang Liu
12:45–13:00	Masato Enomoto		Daniel Schwartz	Benjamin Shassere
13:00–13:15	Qingquan Lai	Mikko Haataja	Yufeng Zheng	Colin Scott
13:15–13:30	Benqiang Zhu		Jiayi Yan	Sunmil Shin

	ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
08:30–09:30	Plenary Session 7: (Emerald Ballroom) George Sawatzky: Importance of atomic scale modeling in describing and predicting properties of solids and interfaces			
09:30–09:45	BREAK			
	10A: Carbide Precipitation in Steels Session Chair - Wenzheng Zhang	10B: Phase Field Modelling III Session Chair - Markus Apel	10C: Shape Memory Alloys Session Chair - Greg Rohrer	10D: From Lab to Application Session Chair - Jose Rodriguez-Ibabe
09:45–10:00	Jer-Ren Yang	Katsuyo Thornton	Dominique Schryvers	Greg Olson
10:00–10:15				
10:15–10:30	Robin Guiz	Amer Malik	Efthymios Polatidis	Zhenjia Xie
10:30–10:45	Yongjie Zhang	Akinori Yamanaka	Yongjun He	Stephane Godet
10:45–11:00	Matthew Hecht	Christina Bjerkén	Chang-Seok Oh	Hideaki Ikehata
11:00–11:15	Ian Zuazo	Long Qing Chen	Loïc Malet	Daisuke Ando
11:15–11:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	11A: Precipitation in Non-Ferrous Alloys: Aluminum Alloys Session Chair - Joseph Robson	11B: Simulation of Ordering and Pattern Formation Session Chair - Chris Wolverton	11C: Characterization of Displacive Transformations in Ferrous Alloys Session Chair - Donald Brown	11D: Order-Disorder Transformations Session Chair - Stephane Gorsse
11:45–12:00	Michel Perez	Pascal Bellon	Frederic Danoix	Pascal Jacques
12:00–12:15				
12:15–12:30	Rosen Ivanov	Yao Shan	Albin Stormvinter	Walter Mayer
12:30–12:45	Eva Gumbmann	Silvere Akamatsu	Yoon-Uk Heo	Camille van der Rest
12:45–13:00	Mark Styles	Ken Elder	Ilana Timokhina	Ryuichiro Oguma
13:00–13:15	Knut Marthinsen		Takashi Yamaguchi	
13:15–14:15	LUNCH - ROOM: EMERALD FOYER AND GRILL & VINE RESTAURANT			
	12A: Coupled Precipitation Session Chair - Jian-Feng Nie	12B: Modelling of Precipitation Session Chair - Jesper Friis	12C: Martensitic & Bainitic Transformations in Steels I Session Chair - Cyril Cayron	12D: Microstructure & Alloy Design Session Chair - Philip Nakashima
14:15–14:30	Robert Hackenberg	Chris Wolverton	Mingxin Huang	Gregory Rohrer
14:30–14:45				
14:45–15:00	Joseph Robson	Thien Duong	Hisashi Sato	Anna Fraczkiewicz
15:00–15:15	Shirley Northover	Minsu Jung	Shiro Torizuka	Hauke Springer
15:15–15:30	Frederic De Geuser	Ernst Kozeschnik	Alfonso Navarro-Lopez	Francisco Coury
15:30–15:45	Manon Bonvalet		Tadachika Chiba	Xavier Sauvage
15:45–16:00	COFFEE BREAK - ROOM: ALPINE FOYER			
	13A: Precipitation: Crystallography, Morphology and Kinetics Session Chair - Elena Pereloma	13B: Simulation of Transformation Plasticity Session Chair - Pascal Bellon	13C: Martensitic & Bainitic Transformations in Steels II Session Chair - Doug Boyd	13D: Nanostructures Session Chair - Xavier Sauvage
16:00–16:15	Wenzheng Zhang	Alphonse Finel	David San Martin	Eugen Rabkin
16:15–16:30			Tomokazu Moritani	
16:30–16:45	Hilmar Danielsen	Andrei Nazarov	Mathew Peet	Alexander Umantsev
16:45–17:00	Jian-Feng Nie	Daniel Schneider	Chris Hulme-Smith	Micha Polak
17:00–17:15	Xinfu Gu	Maeva Cottura	Constantinos Goulas	Philip Nakashima
17:15–17:30	Egle Conforto		Kojiro Motoyama	Guo-zhen Zhu
17:30–17:45	BREAK			
17:45–18:45	Plenary Session 8: Hillert-Cahn Lecture (Emerald Ballroom) Peter Voorhees: Coarsening of two-phase mixtures: From particles to bicontinuous phases			
20:00–22:30	GALA DINNER - EMERALD BALLROOM AT THE WESTIN			

	ALPINE A-B-C	ALPINE D-E	CALLAGHAN ROOM	NORDIC ROOM
08:30–09:30	Plenary Session 9: (Emerald Ballroom) Elizabeth Holm: Building microstructures from the atoms up: Microstructural science supporting ICME			
09:30–09:45	BREAK			
	14A: Phase Transformations in Titanium Session Chair - Pascal Jacques	14B: Modelling and Experiment Session Chair - Greg Olson	14C: Deformation Induced Transformations in Steels Session Chair - Bruno De Cooman	14D: Novel Processing & Novel Materials I Session Chair - Christopher Hutchinson
09:45–10:00	Bala Radhakrishnan	Jesper Friis	John Jonas	Stephane Gorsse
10:00–10:15				
10:15–10:30	Moukrane Dehmas	Qiang Du	Jeom Choi	James Howe
10:30–10:45	Andi Idhil Ismail	Pavel Lejcek	Doug Boyd	Thomas Niendorf
10:45–11:00	Julien Teixeira	Christophe Denoual	Takuro Masumura	Thomas Garcin
11:00–11:15	Thomas Waitz		Ina Sapezanskaia	
11:15–11:45	COFFEE BREAK - ROOM: ALPINE FOYER			
	15A: Phase Transformations in Superalloys Session Chair - Waltraud Kriven	15B: Interfaces and Phase Transformations Session Chair - Pavel Lejcek	15C: Spinodal Decomposition Session Chair - Michel Perez	15D: Novel Processing & Novel Materials II Session Chair - Bala Radhakrishnan
11:45–12:00	Eric Lass	Evgeniya Dontseva	Arnab Mukherjee	Christopher Hutchinson
12:00–12:15		Jun Song	Michael Herbig	
12:15–12:30	Stefan Poulsen	Hussein Farahani	Bij-Na Kim	Malgorzata Lewandowska
12:30–12:45	Marie-Agathe Charpagne	Jörg Neugebauer	Laurent Couturier	Sophie Rivoirard
12:45–13:00	Carlos Capdevila-Montes	Matthias Militzer	Wei-Chun Cheng	Damien Fabregue
13:00–13:15	David Collins		Jerrold Floro	Thomas Philippe