

14 Sep., Sunday

9:30 - 12:30 **Short course I** Alyssa Abbey, Kelly Gallagher Thermal history modelling by QTQt

12:30 - 14:00 **Lunch on your own**

14:00 - 17:00 **Short course II** Kendra Murray, Andrea
Stevens-Goddard, Richard Thermal history modelling by HeFTy
Ketcham

15:00 - 20:00 **Registration desk open**

17:00 - 20:00 **Ice breaker**

15 Sep., Monday

9:30 - 9:45	Opening remarks by LOC			
9:45 - 10:15	Special lecture	Mannen	Kazutaka	Mt Fuji: Past Eruptions and Present Preparedness
Session I: Radiation Damage		Chairs: Ling Chung, Georgina King, Shin Toyoda, Hideki Iwano		
10:15 - 10:30		Vermeesch	Pieter	FAIR fission track analysis with geochron@home
10:30 - 10:45	Student award nomination	Beltran	Gabriel	Assessment on the trace element control on apatite fission-track annealing, Anadarko Basin, OK, USA.
10:45 - 11:00		Trilsch	Florian	A virtual KTB (Kontinentale Tiefbohrung): The ultimate benchmark for apatite fission track annealing?
11:00 - 11:15		Nakajima	Toru	The KTB monazite fission-track profile: initial insights into ultra-low temperature thermochronology from a natural laboratory
11:15 - 11:45	Break			
11:45 - 12:00		McMillan	Malcolm	Fission tracks in monazite respond to ambient temperature fluctuations
12:00 - 12:15		Jepson	Gilby	The influence of monazite composition on fission-track ages
12:15 - 12:30		King	Georgina	ESR thermochronometry: a status update
12:30 - 12:45		Schmidt	Christoph	Thermoluminescence paleothermometry – A new method for terrestrial surface air temperature reconstruction and its application to key sites in the northern hemisphere
12:45 - 14:00	Lunch			

Session II: Higher temp. methodologies			Chairs: Stijn Glorie, Hisatoshi Ito	
14:00 - 14:20	Glorie	Stijn	Coupled K-Ca and Rb-Sr thermochronology by LA-ICP-MS/MS	
14:20 - 14:40	Iwano	Hideki	Apatite U–Th disequilibrium geochronology: Application and limitation	
14:40 - 15:00	Niki	Sota	Radioactive disequilibrium isotope systematics in monazite	
15:00 - 15:30	Group photo and Break			
Session III: Noble gas			Chairs: Marissa Trembley, Daniel Stockli, Masafumi Sudo	
15:30 - 15:45	Haertel	Birk	Linking apatite (U-Th-Sm)/He age dispersion to grain properties	
15:45 - 16:00	Tremblay	Marissa	Evidence that dislocations in apatite trap helium and cause (U-Th)/He date overdispersion	
16:00 - 16:15	Student award nomination	Flaherty	Alessandra	Does Helium Accumulation in Radiation Damage Modify Helium Diffusion and Annealing Kinetics in Apatite?
16:15 - 16:30		Ketcham	Richard	The effects of radiation damage accumulation, zoning, annealing, and percolation on He diffusion in zircon
16:30 - 16:45		Hueck	Mathias	Extreme overdispersion of in-situ (U-Th)/He zircon data due to intra-crystalline redistribution of radiogenic He during alpha ejection
16:45 - 17:00		Hofmann	Florian	Investigating the offset of a piercing point prior to the initiation of the San Andreas Fault (California, USA) using ⁴⁰ Ar/ ³⁹ Ar thermochronology

16 Sep., Tuesday

Session IV: Numerical analysis

Chairs: Pieter Vermeesch, Richard Ketcham

9:00 - 9:15		Murray	Kendra	Exploring the Utility of the Controlled Random Search (CRS) Algorithm for Thermal History Analysis in HeFTy
9:15 - 9:30		Gallagher	Kerry	3D spatial modelling of thermochronological data revisited, again
9:30 - 9:45	Student award nomination	Gelman	Sarah	Combining flexural basin modeling and thermochronology to model 3D subsidence and heat flow in poly-phase tectonic basins
9:45 - 10:00		Ding	Ruxin	Inversion of topographic evolution using low-T thermal history: A case study from Eastern China
10:00 - 10:15		Powell	Jeremy	The CANadian ThermoCHronology (CATCH) database: a complete compilation of Canadian fission track, (U-Th)/He and thermal history data
10:15 - 10:30		Boone	Samuel	Calibration of global-scale landscape evolution models using thermochronology data

10:30 - 11:00 **Break**

Session V: Subduction margin

Chairs: Edward Sobel, Eva Enkelmann, Shigeru Sueoka

11:00 - 11:20	Student award nomination	Villamizar-Escalante	Nicolas	Tracking lateral slab tearing through exhumation signal in the Calabrian Arc, Southern Italy
11:20 - 11:40	Student award nomination	Jabagat	Karl	Constraining Young Eruption Ages with Low-T Thermochronology: Combined Zircon U-Th/He and U-Th Disequilibrium Dating (ZDD) in the Tatun Volcano Group, Taiwan
11:40 - 12:00	Student award nomination	Bian	Kaige	Yanshanian Hydrothermal Activity in the Northern Margin of the South China Sea: Evidence from Progressive Crushing 40Ar/39Ar Chronology of Quartz Veins

12:00 - 12:30	Student poster short talks			
	P5	Xing	Yukun	Investigating the Influence of Crystallographic Orientation on Monazite Fission Track Results
	P6	Xing	Yukun	Six Potential Reference Materials for Monazite LA-ICP-MS Trace Element Analysis
	P7	Hayato	Asai	Step etching experiments on monazite with various formation ages: results of fission track length, width and density
	P9	Haag	Ryan	An assessment of the titanite fission-track thermochronometer on an exhumed fault block, White Mountains, California
	P14	Muller	Isabella	Uranium Zoning Evaluation for Fission Track Dating
	P15	Muller	Isabella	Fully 3D Visualization and Measurement of Fission Tracks in Apatite
	P32	Wu	Didi	Proterozoic thermal evolution of SE Laurentia revealed by apatite thermochronology
	P34	Xie	Fang	Fine Characterization Based on the Thermal History of Low-temperature Thermochronology: Hydrocarbon Generation Characteristics of Source Rocks in the Jiyang Depression
	P35	Jakobsson	Vidar	Assessing intragrain chemical heterogeneities in white mica and their impact on 40Ar/39Ar and Rb-Sr dates
	P38	Cox	Stephen	An exploration of gas evolution curve-fitting for 40Ar/39Ar dating
	P40	Maier	Ann-Kathrin	Damage is key: Using radiation-damaged zircons to reconstruct craton evolution in Finnish Fennoscandia
	P44	An	Jie	Vesuvianite : A new mineral species of (U-Th)/He geochronology
	P53	Ehrenfels	Maximilian	Laser-Ablation (U-Th)/He Dating of Chromite and Magnetite in Serpentinized Shear Zones: A Novel Approach to Constrain Continental Collision Events
	P55	Hoemann	Hagen	Oranges and apples of in-situ (U-Th)/He analysis: optimizing the laser ablation geometries by OptiPit
	P60	Montiel	Paula	Thermal evolution and formation of supergene mineralization in the El Salvador District, Chile: evidence from geo-thermochronology.
	P64	SUN	Yuxin	The control of pre-existing structures on the Meso-Cenozoic reactivation in the western Chinese Tianshan
	P66	Gallant	Kyle	Updates to the structural and tectonic evolution of the Fra Cristobal range, central New Mexico using field data and thermochronology: Implications for overprinting tectonic events

12:30 - 13:30	Lunch	*ISCT official meeting		
13:30 - 15:20	Poster session			
Session V: continues				Chairs: Edward Sobel, Eva Enkelmann, Shigeru Sueoka
15:20 - 15:40	Student award nomination	Sandoval Espinel	Leidy Carolina	Thermotectonic history of the southernmost northern Andes
15:40 - 16:00		Gomez Marulanda	Sebastian	Reconstructing the Timing and Mechanisms of Exhumation in the Transition Zone between the Central and Northern Andes
16:00 - 16:30	Keynote talk	Mackaman-Lofland	Chelsea	What were the drivers of hinterland uplift & exhumation in the southern central Andes (29–34°S)? Insights from multi-sample thermal history modeling (HeFTy 2)
16:30 - 17:00	Special lecture	Kohlmann	Fabian	From Cooling Ages to Discovery: The Expanding Role of Thermochronology in Mineral Exploration
17:00 - 19:30	Short course III	Samuel Boone		Geospatial archival, dissemination and interrogation of thermochronology data

17 Sep., Wednesday**Mid-conference excursion****18 Sep., Thursday****Session VI: Collision zone**

Chairs: Gilby Jepson, Meinert Rahn, Yuan-Hsi Lee

9:00 - 9:30	Keynote talk	Zhang	Bin	Inverted apatite fission track and (U-Th)/He ages identified two-stage evolution of the northwestern Tibetan Plateau
9:30 - 9:50		He	Zhiyuan	Fault-driven exhumation in the southeastern margin of the Tibetan Plateau: Thermochronological insights into Cenozoic crustal deformation
9:50 - 10:10		Lee	Yuan Hsi	Mountain Building Process of Taiwan Orogeny
10:10 - 10:30	Student award nomination	Boschetti	Louise	From Tropical Bauxites to Orogenic Exhumation: (U-Th)/He Dating Unravels Polyphase Tectonics in Southern France.
10:30 - 10:50		Heberer	Bianca	Rapid Late Miocene exhumation along and across the Insubric Line depicted by a multi-method geo- and thermochronological approach
10:50 - 11:10	Break			

Session VIII: Surface processes part 1

Chairs: Peter van der Beek, Yuntao Tian, Sumiko Tsukamoto

11:10 - 11:40	Keynote talk Student award nomination	Wen	Xiaoxia	Exhumation histories of the western European Alps (Switzerland) using ESR thermochronometry and numerical modeling (Pecube)
11:40 - 12:00	Student award nomination	Gong	Lingxiao	Discriminating between late-Cenozoic tectonic and glacial control on landscape development of the Terskey Range, Kyrgyz Tian Shan

12:00 - 12:30	Student poster short talks			
P72	Asahi	Yusuke	Cooling history of the Chugoku Mountains, southwest Japan, revealed by (U-Th)/He thermochronology: preliminary results	
P76	Ignacio	Lei Anne Reczyle	Magma Storage and Eruptive History of the Tatum Volcanic Group (Taiwan): Insights from Petrology, Thermobarometry, and combined Zircon U-Th disequilibrium and U-Th/He dating (ZDD)	
P80	Wang	Fujun	Late Cenozoic convergence between the Pamir and the Tianshan recorded by zircon and apatite (U-Th-Sm)/He thermochronology	
P85	Yu	Taiyan	Mechanism of differential enrichment and preservation of Ediacaran-Cambrian Shale in South China: Insight from tectonic-thermal evolution	
P93	Yifan	Yang	Convergence between Indian-Asian plates, insights from detrital thermochronology of Late Cretaceous to Early Cenozoic basins within the India-Asia collision zone	
P96	Shi	Zhe	Uplift and erosion history of Mongolian Altai Mountains using thermochronological methods	
P97	VanDyke	Eli	Applying Low-temperature Thermochronology to Constrain the Timing and Magnitude of Deformation in Mongolian Walled Basins	
P109	Machaca Sardon	Cristian Miguel	Thermokinematic restoration on the Marañón Fold and Thrust Belt across the Cordillera Blanca and Eastern Cordillera, Peru.	
P110	Calderon-Diaz	Laura	Distinguishing between post-orogenic cooling and orogenic erosion along the Central Cordillera of Colombia	
P111	Patino Acevedo	Ana Maria	Low-Temperature Exhumation Patterns in the Northern Chilean Forearc (22.5-24.5°S)	
P112	Lima	Samuel	Spatial Variability in Thermal Resetting and Maximum Burial Temperatures in the Eastern Parnaíba Basin (Brazil): Insights from Zircon (U–Th)/He Data	
P113	Assis	Andre	Thermo-tectonic evolution and sediment provenance of the eastern Parnaíba Basin (NE Brazil): Implications for Cretaceous sea connectivity with the Araripe Basin	
P115	Boyd	Abigail	Reconstructing the drivers of exhumation within the Canadian Rocky Mountain fold-thrust belt using low-temperature thermochronology	
P116	Wang	Xi	Thermochronologic Constraints on the Exhumation History of Porphyry Systems in the Quesnel Terrane, Canadian Cordillera	
P117	Qiao	Xin	Records of paired uplift-subsidence along the western margins of North America: a thermochronological study of Vancouver Island, Canada	
P106	Profeta	Lucia	Testing detrital apatite fission-track as a tool for quantifying erosion rates during the Paelocene-Eocene Thermal Maximum, Pyrenees, Spain	
P108	Wapenhans	Isabel	Quaternary glacial erosion recorded by low-temperature thermochronology in the Tauern Window, Eastern European Alps	
P121	Hesthammer	Jostein	Evaluating the Magnitude of Cryogenian Erosion in the Flinders Ranges region, South Australia, Using AFT, ZFT, and Zircon U–Th/He Thermochronology	

12:30 - 13:30	Lunch			
13:30 - 15:20	Poster session			
Session VII: Passive margin + Sedimentary basin part 1				Chairs: Barry Kohn, Andrew Geladow, Bin Deng
15:20 - 15:35	Student award nomination	Zhan	Wenbo	Reevaluating the Formation and Retreat of the Great Escarpment in Southeast Australia with $4\text{He}/3\text{He}$ Thermochronology
15:35 - 15:50	Student award nomination	Anaya	Jonathan	Extracting Deep-Time Cooling Histories of the Mongolian Altai Using Inverse Thermal History Modeling of Detrital Zircon U-Pb-He Modes
15:50 - 16:05	Student award nomination	Miller	Elisha	Miocene Rift Initiation Signal in Lake Tanganyika
16:05 - 16:20	Student award nomination	Mayer-Ullmann	Ferdinand	Permian-Triassic rift nucleation of the East Antarctic margin revealed by low-temperature thermochronology
16:20 - 16:50	Break			
16:50 - 17:00	Announcement from the ISCT			
17:00 - 18:00	Awards ceremony			
19:00 -	Banquet			

19 Sep., Friday

Session VIII: Surface processes part 2

Chairs: Peter van der Beek, Yuntao Tian, Sumiko Tsukamoto

9:00 - 9:20	van der Beek	Peter	Quantifying Quaternary glacial erosion and relief development in mountain belts with 4He/3He thermochronology
9:20 - 9:40	Bernard	Thomas	Continuous and Long-Term Surface Uplift Rate History Predictions of South-Central Germany
9:40 - 10:00	Wang	Ying	Rapid Plio-Pleistocene Incision and Exhumation of Tiger Leaping Gorge, Tibetan Plateau
10:00 - 10:20	Wang	Guocan	Two Cycles of Planation and Mountain Building during Meso-Cenozoic Eras in the Eastern Tianshan, Central Asia
10:20 - 10:50	Break & Scientific Committee meeting (student awards)		

Session VII: Passive margin + Sedimentary basin part 2

Chairs: Barry Kohn, Andrew Geladow, Bin Deng

10:50 - 11:05	Fonseca	Ana Carolina	Phanerozoic cratonic (in)stability: using apatite fission track thermochronology to investigate cratonic evolution
11:05 - 11:20	Abbey	Alyssa	Modeling Complex Low-Temperature Thermochronology Data: A Case Study from the Argentina Precordillera
11:20 - 11:35	Deng	Bin	Cenozoic Yangtze broken foreland basin at southern margin of Tibetan Plateau, evidence from detrital apatite geochemistry and thermochronology
11:35 - 13:10	Lunch		
13:10 - 15:00	Student awards and closing		

15:30 - 18:00	Short course IV	Peter van der Beek, Lingxiao Gong, Isabel Wapenhans	Thermochronology and landform development (Pecube-GUI)
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20 Sep., Saturday

9:30 - 12:00 **Short course V** Pieter Vermeesch Statistics in geo-and thermo-chronology

12:00 - 13:30 **Lunch on your own**

13:30 - 16:00 **Short course VI** Chelsea Mackaman-Lofland Using multi-sample thermal history modeling (HeFTy, FETKin) to test structural hypotheses