

**Frontiers in Nonlinear Differential Equations and Stokes Phenomena
Symposium Schedule**

For further details or inquiries, please contact the TVSP Team at <tsvp@oist.jp>

Guide to symposium talk types	
<i>Public talk (50 min, 10 min questions)</i>	Accessible to both non-specialists and the wider public; these talks will be made available on YouTube; very wide ranging audience from non-mathematicians and non-scientists to specialists
<i>Panorama talk (50 min, 10 min questions)</i>	Colloquium-style introduction to important questions in the area, overview of research etc. Accessible to an audience that may span several disciplines in pure and applied mathematics and theoretical physics.
<i>Lectures (50 min, 10 min questions)</i>	Graduate-level summer school. Pedagogical to enable the various research areas to be able to interact.
<i>Research talks (25 min intro, 5 min break, 25 min research, 5 min questions)</i>	We will ask everyone to prepare their talks with 25 minutes of pedagogical background and 25 minutes of research talk. This split may be enforced by having a break in between the two halves!

Monday 4 Sept, Venue: L5EF03	
14:00 onwards	Registration in TSVP area, OIST Lab 5 EF03 (access)
16:00-17:00	Welcome coffee at TSVP area

Tuesday 5 Sept, Venue: L4E48		
Time	Speaker	Topic
09:30-10:30	Adri Olde Daalhuis (University of Edinburgh)	Panorama talk on exponential asymptotics
10:30-11:00		Coffee
11:00-12:00	Shinji Sasaki (Shibaura Institute of Technology)	Borel summability of transformation to canonical equations in the exact WKB analysis
12:00-13:15		Lunch
13:15-13:30 Welcome by OIST's Dean of Research Nicholas M. Luscombe		
13:30-14:30	Philippe Trinh (University of Bath)	An introduction to applied exponential asymptotics: methodology and computation
14:30-15:00		Coffee
15:00-16:00	Dan Dai (City University of Hong Kong)	Asymptotics and total integrals of the $P(i)^2$ tritonquée solution and its Hamiltonian
16:00 onwards		Coffee, free discussion, end of day

Wednesday 6 Sept, Venue: L4E48		
Time	Speaker	Topic
9:30-10:30	Oleg Lisovyi (Université de Tours)	Perturbative connection formulas for Heun equations
10:30-11:00		Coffee
11:00-12:00	Pavlo Gavrylenko (SISSA)	Isomonodromic deformations on a torus, Fredholm determinants, and Nekrasov partition functions.
12:00-13:30		Lunch
13:30-14:30	Akira Shudo (Tokyo Metropolitan University)	The role of new Stokes curves in some physics problems
14:30-16:00		Coffee and free time
16:00-17:00	Nikita Nikolaev (University of Birmingham)	Research talk (online)
17:00 onwards		Coffee, free discussion, end of day

Thursday 7 Sept, Venue: L4E48		
Time	Speaker	Topic
9:30-10:30	Yoshitsugu Takei (Doshisha University)	On the exact WKB analysis for difference equations
10:30-11:00		Coffee
11:00-12:00	Harini Desiraju (SMRI, University of Sydney)	Monodromy dependence of tau-functions on the torus
12:00-13:30		Lunch
13:30-14:30	Dylan Allegretti (Tsinghua University)	Asymptotics of spectral coordinates
14:30-15:00		Coffee
15:00-16:00	Akira Shudo (Tokyo Metropolitan University)	Quantum Signatures of Chaos
18:30-20:30 Conference banquet at Umusan no Niwa restaurant in Onna village (Taxis depart OIST at 18:00)		

Friday 8 Sept, Venue: Center, C209		
Time	Speaker	Topic
9:30-10:30	Martin Guest (Waseda University)	Stokes Phenomena in geometry
10:30-11:15		Coffee
11:15-12:15	Nicolas Delporte (OIST)	Peeking at quantum gravity with self-overlapping curves
12:15-13:30		Lunch
13:30-14:30	Fabrizio Del Monte (University of Sheffield)	Wall-Crossing and Discrete Integrable Systems
14:30-18:30		Discussions in TSVP area L5EF03

Saturday 9 Sept		
09:00-17:30		
Excursion for participants and family		

Monday 11 Sept, Venue: L5EF03		
Time	Speaker	Topic
9:30-10:30	Nick Dorey (University of Cambridge)	Panorama talk
10:30-11:00		Coffee
11:00-12:00	Kohei Iwaki (University of Tokyo)	Non-linear Stokes phenomenon for Painleve tau-function and topological recursion
12:00-13:30		Lunch
13:30-14:30	Gergő Nemes (Tokyo Metropolitan University)	An introduction to exponential asymptotics
14:30-15:00		Coffee
15:00-15:30	Cecilie Andersen (University of Bath)	Exponential asymptotics for the Saffman-Taylor problem in a wedge (online)
15:30 onwards		Coffee, free discussion, end of day

Tuesday 12 Sept, Venue: L5EF03		
Time	Speaker	Topic
9:30-10:30	Jon Chapman (University of Oxford)	Asymptotics beyond all orders: the devil's invention?
10:30-11:00		Coffee
11:00-12:00	Yumiko Takei (Ibaraki College)	Research talk
12:00-13:30		Lunch
13:30-14:00	Josh Shelton (University of Bath)	Beyond-all-order effects in surface water waves (online)
14:00-14:30		Coffee
14:30-15:00	Chris Lustrì (University of Sydney)	Research talk (online)
15:00 onwards		Coffee, free discussion, end of day

Wednesday 13 Sept, Venue: L5EF03		
Time	Speaker	Topic
9:30-10:30	Robert Osburn (UCD)	Strange identities, the Habiro ring and resurgence
10:30-11:00		Coffee
11:00-12:00	Takeshi Kataoka (Kobe University)	2D ship waves and exponential asymptotics
12:00-13:30		Lunch
13:30-14:30	Cihan Pazarbaşı (OIST)	Research talk
14:30-15:00		Coffee
15:00-16:00	Jon Chapman (University of Oxford) - Venue: Center, B250	Waves and Resonance: From Musical Instruments to Vacuum Cleaners, via Metamaterials and Invisibility Cloaks
16:00 onwards		Coffee, free discussion, end of day

Thursday 14 Sept, Venue: L5EF03		
Time	Speaker	Topic
9:30-10:30	Omar Kidwai (University of Birmingham)	Quantum curves from refined topological recursion
10:30-11:00		Coffee
11:00-12:00	Samuel Crew (MPI)	Research Talk
12:00-13:30		Lunch
13:30 onwards		Coffee, free discussion, end of day

Friday 15 Sept		
Coffee, free discussion, departure		