

Schedule of the 12th Festival de Théorie, July 4-29, 2022

Week 1 - July 4-8	08:30	09:10 - 10:00	10:00 - 10:40	10:40	11:00 - 11:55	11:55 - 12:30	12:30 - 14:30	14:30	15:15	16:00	16:15	17:30	18:30 - 20:00		
Monday 4	Welcome	A. Pumir	discussion	Coffee	P. Manz	discussion	Lunch	B. Metzger	discussion	Coffee	Q&A Pumir				
	08:30	09:00 - 09:50	9:50 - 10:30	10:30	11:00 - 11:45	11:45 - 12:30			14:30	15:15	16:00	16:15	17:30	18:30 - 20:00	
Tuesday 5		S. Tobias	discussion	Coffee break	R. Varennes	M. Veranda			F. Marcotte	discussion	Coffee break	Q&A Tobias			
Wednesday 6		D. Dritschel	discussion			E. Serre		discussion		O.D. Gurcan		discussion		Q&A Dritschel	
Thursday 7		D.W. Hughes	discussion			A. Guillevic		G. Brochard		G. Tynan		discussion		Q&A Hughes	
Friday 8		P.H. Diamond	discussion			L.P. Goswami	N. Cao		A. Das	discussion			Q&A Diamond		Public conference

Week 2 - July 11-15	08:30	09:00 - 09:50	9:50 - 10:30	10:30	11:00	11:45	12:30 - 14:30	14:30	15:15	16:00	16:15	17:30	18:30 - 20:00		
Monday 11		C. Rampf	discussion	Coffee break	R. Heinonen	Q. Kriaa	Lunch	B. Favier	discussion	Coffee break	Q&A Rampf				
Tuesday 12		Y. Sarazin	discussion			A. Milovanov		Z. Lin			L. Schmitz	discussion		Q&A Sarazin	Conference dinner
Wednesday 13		A. Frishman	discussion			G. Ricard		F. Novkoski			C. Hidalgo	discussion		Q&A Frishman	
Thursday 14		BASTILLE DAY				BASTILLE DAY			BASTILLE DAY			BASTILLE DAY			
Friday 15		L. Biferale	discussion			C. Holland		T.S. Hahm			H. Li	discussion		Q&A Biferale	

Week 3 - July 18-22	08:30	09:00 - 09:50	9:50 - 10:30	10:30	11:00	11:45	12:30 - 14:30	14:30	15:15	16:00	16:15	17:15	18:00		
Monday 18		B. Gallet	discussion	Coffee break	R. Juneja	Priya	Lunch	PROJECTS		Coffee break	PROJECTS				
Tuesday 19						F. Ramirez		Q. Yan							
Wednesday 20		PROJECTS				PROJECTS			C. Paz-Soldan		discussion		Donnel / Di Giannatale	R. Singh	
Thursday 21						PROJECTS			PROJECTS			PROJECTS			
Friday 22															

Week 4 - July 25-29	08:30	09:00	10:30	11:00	12:30 - 14:30	14:30	16:00	16:15	18:00	
Monday 25		PROJECTS		Coffee break	PROJECTS		Lunch	PROJECTS		
Tuesday 26		PROJECTS			PROJECTS			PROJECTS		
Wednesday 27		PROJECTS			PROJECTS			PROJECTS		
Thursday 28		Symposium day			Symposium day			Symposium day		Closing
Friday 29		Symposium day			Symposium day			Symposium day		

Tutorials: 55 + 25 min

Topicals: 30 + 15 min

Lectures / Q&A: 1h 15 min

Short contrib.: 20 + 10 min

Social events

A. Pumir	Turbulence generation through an iterative cascade of elliptical instability
P. Manz	A model for the bifurcated l-mode regime
B. Metzger	Introduction to granular suspensions
S. Tobias	Model Reduction, Prediction and (Methods from) Control in Fluids, MHD & Dynamos
R. Varennes	Interplay between neoclassical magnetic braking and turbulent stress tensor regarding plasma flow
M. Veranda	Addressing stochastic transport using Lagrangian Coherent Structures
F. Marcotte	Identification of subcritical dynamos and minimal seeds
D. Dritschel	The late-time evolution of single-layer geophysical flows
E. Serre	k-ε reduction for cross-field turbulent transport for core & edge plasma
O.D. Gurcan	Cascade models for micro-instabilities in fusion plasmas
D.W. Hughes	Magnetic Buoyancy and the Anelastic Approximation
A. Guillevic	On the road to Kubo > 1: Quasi-linear theory in a 1D plasma
G. Brochard	Kinetic-MHD simulations for the internal kink instability
G. Tynan	Shear layer physics at the closed-open field line transition
P.H. Diamond	SOL Broadening by Edge Turbulence: Experiment and Theory of Entrainment Dynamics
L.P. Goswami	Role of Ponderomotive force in laser energy absorption in Magnetized plasma
N. Cao	Rossby waves past the breaking point in zonally-dominated turbulence
A. Das	Magnetic field generation through finite boundary effects
C. Rampf	The Vlasov-Poisson system in cosmology
R. Heinonen	Optimal policies for olfactory search using partially observable Markov decision processes
Q. Kriaa	Sedimentation of particle clouds

B. Favier	Zonal jets at the laboratory scale: hysteresis and Rossby waves resonance
Y. Sarazin	Flow dynamics and turbulence self-organization in tokamak plasmas
A. Milovanov	The plasma staircase meets the nonlinear Schrödinger equation
Z. Lin	Regulation of Alfvén eigenmodes by microturbulence in fusion plasmas
L. Schmitz	Transition physics in plasmas: micro and macro perspectives
A. Frishman	Transition to turbulence in wall bounded flows
G. Ricard	Wave turbulence in 1d
F. Novkoski	Surface Waves along a Torus of Fluid
C. Hidalgo	Transport control and self-organization in fusion plasmas: An experimentalist's view
L. Biferale	A.I. meets complex flows: Lagrangian & Eulerian data-driven tools for optimal navigation & data-assimilation
C. Holland	Model reduction to help characterise turbulence and transport in fusion plasmas
T.S. Hahm	ExB vortex dynamics around a magnetic island
H. Li	Instabilities, Feedback and Modulations in Astrophysical Disk and Dust Flows
B. Gallet	Heat transport by baroclinic turbulence in oceans and planetary atmospheres
R. Juneja	Stochastic particle trajectories in laser-plasma interaction
Priya	Chaotic rotations in strongly coupled charged dust clusters
Ramirez / Yan	Staircases: melting vortex crystals / Darnet w. resonant particles
C. Paz-Soldan	Negative Triangularity Tokamak: Progress and Opportunity
Donnel / Di Giannatale	Modelling of negative triangularity plasmas
R. Singh	Zonal flows in negative triangularity tokamaks