

Stellar Hydro Days IV: Programme

Sunday, 28 May, 2017

17:30 – 20:30 Pub "reception"

Monday, 29 May, 2017

09:00 – 09:20 Welcome address and program update

09:20 – 10:10 Isabelle Baraffe Multi-dimensional fully compressible, time implicit simulations of hydrodynamical processes in stars

10:10 – 11:00 Discussion

11:00 – 11:30 Coffee break & Registration

11:30 – 11:50 Andrea Cristini ILES of shell carbon burning

11:50 – 12:10 Discussion

12:10 – 13:20 Lunch break

13:20 – 13:40 Simon Campbell First attempts at 3D simulations of core helium burning stars

13:40 – 14:00 Discussion

14:00 – 14:20 Johann Higl Simulating Hydrogen Burning Cores in Low Mass Stars

14:20 – 14:40 Discussion

14:40 – 15:10 Coffee break & Registration

15:10 – 17:30 Group discussions

Tuesday, 30 May, 2017

09:00 – 09:50 Paul Woodward Simulation of Convective Boundary Mixing with PPMstar

09:50 – 10:40 Discussion

10:40 – 11:10 Coffee break

11:10 – 11:30 Catherine Lovekin Constraining stellar convection using asteroseismology

11:30 – 11:50	Discussion	
11:50 – 13:20	Lunch break	
13:20 – 13:40	Timothy Van Reeth	The interior rotation of intermediate-mass stars
13:40 – 14:00	Discussion	
14:00 – 14:20	May Pedersen	Constraining the shape of convective core overshooting using slowly pulsating B-type stars
14:20 – 14:40	Discussion	
14:40 – 15:10	Coffee break	
15:10 – 17:30	Group discussions	

Wednesday, 31 May, 2017

09:00 – 09:30	Fritz Roepke	Low Mach number fluid dynamics for stellar applications with the Seven-League Hydro code
09:30 – 10:00	Discussion	
10:00 – 10:20	Philipp Edelmann	Hydrodynamics of Dynamical Shear Instabilities in Massive Stars
10:20 – 10:40	Discussion	
10:40 – 11:10	Coffee break	
11:10 – 11:30	Vincent Prat	Shear-driven turbulent transport in stellar radiative zones
11:30 – 11:45	Discussion	
11:45 – 12:05	Delphine Hypolite	The 2D dynamics of the radiative envelope of massive stars
12:05 – 12:20	Discussion	
12:20 – 13:20	Lunch break	
13:20 – 13:40	Joshua Dolence	Results of core-collapse modeling for a variety of progenitors
13:40 – 14:00	Discussion	
14:00 – 14:15	Christian Ritter	O-C shell merger nucleosynthesis
14:15 – 14:30	Discussion	

14:30 – 17:30 Excursion

18:00 – 20:00 Self-organized dinner downtown

Thursday, 1 June, 2017

09:00 – 09:50 Bernhard Mueller The Role of Multi-D Stellar Evolution for the Core-Collapse Supernova Explosion Mechanism

09:50 – 10:40 Discussion

10:40 – 11:10 Coffee break

11:10 – 11:40 Christopher Fryer Stellar Convection and the Supernova Explosions

11:40 – 12:10 Discussion

12:10 – 13:10 Lunch break

13:10 – 13:25 Austin Davis TBD

13:25 – 13:40 Discussion

13:40 – 14:10 Falk Herwig Hydrodynamic nucleosynthesis and observational constraints for convective boundary mixing

14:10 – 14:40 Discussion

14:40 – 15:10 Coffee break

15:10 – 17:30 Group discussions

18:00 – 20:00 Workshop dinner

Friday, 2 June, 2017

09:00 – 09:50 Michael Zingale Modeling Stellar Convection and Explosions with Maestro, Castro, and the BoxLib/AMReX

09:50 – 10:40 Discussion

10:40 – 11:20 Coffee break

11:20 – 11:40 Cyril Georgy Convection in massive stars

11:40 – 12:00 Discussion

12:00 – 13:20	Lunch break	
13:20 – 13:40	Samuel Jones	Modelling stars near the electron-capture supernova limit
13:40 – 14:00	Discussion	
14:00 – 14:20	Robert Andrassy	3D hydrodynamic simulations of C ingestion into a convective O shell
14:20 – 14:40	Discussion	
14:40 – 15:10	Coffee break	
15:10 – 17:30	Group discussions	