

# Celestial Mechanics April 17-22, 2004



#### **MEALS**

### (Saturday dinner to Thursday lunch are included in workshop)

Breakfast (Continental): 7:00 – 8:25, 2<sup>nd</sup> floor lounge, Corbett Hall, Sunday-Thursday \*Lunch (Buffet): 12:00 – 13:30 pm, Donald Cameron Hall, Sunday-Thursday \*Dinner (Buffet): 17:30 – 19:30 pm, Donald Cameron Hall, Saturday-Wednesday Coffee Breaks: As per daily schedule, 2<sup>nd</sup> floor lounge, Corbett Hall

\*Please remember to scan your meal card at the host/hostess station in the dining room for each lunch and dinner.

#### **MEETING ROOMS**

All lectures will be held in Max Bell 159. Please note that the meeting space designated for BIRS is the lower level of Max Bell, Rooms 155-159. Please respect that all other space has been contracted to other Banff Centre guests, including any Food and Beverage in those areas.

#### **SCHEDULE**

#### Saturday, April 17---arrival

17:30-19:30 Dinner From 19:30 Informal Gathering in 2<sup>nd</sup> floor lounge, Corbett Hall

#### Sunday, April 18

7:00-8:25	Breakfast
8:15-8:30	A welcome word from the organizers and from BIRS
8:30-9:15	Alain Chenciner: Rotating eights
9:30-10:15	Ernesto A. Lacomba: Symbolic dynamics in the rectilinear R3BP
10:30-11:00	Coffee
11:00-11:45	Montserrat Corbera: Global existence of subharmonic orbits in the SP
12:00-13:00	Lunch
13:00-14:00	Guided tour of the Banff Centre; meet in 2 <sup>nd</sup> floor lounge, Corbett Hall
14:00-14:30	Break
14:30-15:15	Richard Montgomery: Fitting hyperbolic pants to a 3BP
15:30-16:00	Coffee
16:00-16:45	Dan Offin: Variational-stability method for some nBPs
17:00-17:30	Break
17:30-19:30	Dinner

## Monday, April 19

7:00-8:30	Breakfast
8:30-9:15	Ernesto Perez-Chavela: Symmetrical central configurations in the 4BP
9:30-10:15	Ken Meyer: Elliptic central configuration solutions of the nBP
10:30-11:00	Coffee
	Patricia Yanguas: Dynamics of charged particles in planetary magnetospheres
12:00-12:10	Group photo; meet on the front steps of Corbett Hall
12:10-13:30	Lunch
13:30-14:30	Break
14:30-15:15	Alain Albouy: New hidden symmetries in the Kepler problem and Lambert's theorem
15:30-16:00	Coffee
16:00-16:45	Gareth Roberts: Linear stability analysis of the figure-eight orbit
17:00-17:30	Break
17:30-19:30	Dinner

## Tuesday, April 20

7:00-8:30	Breakfast
8:30-9:15	Jaume Llibre: On the families of periodic orbits in the SP
9:30-10:15	Chris McCord: Collinear blow-ups and integral manifolds of the spatial nBP
10:30-11:00	Coffee
11:00-11:45	Joe Gerver: Infinite spin and non-collision singularities
12:00-13:30	Lunch
13:30-14:30	Break
14:30-15:15	Manuele Santoprete: Qualitative properties of 2BPs with anisotropic potentials
15:30-16:00	Coffee
16:00-16:45	Ilias Kotsireas: Symmetries of polynomial and differential equations
16:45-17:30	Break
17:30-19:30	Dinner

# Wednesday, April 21

7:00-8:30	Breakfast
8:30-9:15	Jeff Xia: Action-minimizing periodic and quasi-periodic solutions of the nBP
9:30-10:15	Richard Cushman: Monodromy in the swing spring
10:30-11:00	Coffee
11:00-11:45	Marshall Hampton: New central configurations in the 5BP
12:00-13:30	Lunch
13:30-17:30	Free afternoon (trips, discussions, relaxation etc.)
17:30-19:30	Dinner

## Thursday, April 22

7:00-8:30	Breakfast
8:30-9:15	Don Saari: Analysing central configurations
9:30-10:15	Ed Belbruno: Chaos with weak ballistic capture, and low energy lunar transfer

10:30-11:00 Coffee
11:00-12:00 Proposal and discussion of themes for a future Banff Meeting in celestial mechanics
12:00-13:30 Lunch

From 13:30 Departure