

PREMI BARCELONA DYNAMICAL SYSTEMS 2015

Barcelona, 16 d'Octubre de 2015

És un goig per a la Societat Catalana de Matemàtiques fer pública la resolució del premi **Barcelona Dynamical Systems 2015** sota el mecenatge del professor Carles Simó i Torres.

En aquesta primera edició del premi el jurat ha estat format per:

- Henk Broer (University of Groningen)
- Robert L. Devaney (Boston University)
- Yu.S. Ilyashenko (Cornell University)
- Richard Montgomery (University of California, Santa Cruz)
- Marcelo Viana (IMPA)
- Amadeu Delshams (UPC, Secretari del jurat sense vot)

Després de llargues deliberacions la decisió del jurat ha estat la següent:

To propose that the Societat Catalana de Matemàtiques (SCM) award the Barcelona Dynamical Systems Prize 2015, under the patronage of Prof. Carles Simó, to

Alberto Enciso and *Daniel Peralta-Salas* as the authors of the paper **Existence of knotted vortex tubes in steady Euler flows**, Acta Math. 214 (2015), no. 1, 61–134;

and ex aequo to

Marcel Guardia, *Pau Martín* and *Tere M. Seara* as the authors of the paper **Oscillatory motions for the restricted planar circular three body problem**, Invent. Math., published online 11 April 2015, pp 1-76.

In the paper by Alberto Enciso and Daniel Peralta-Sala, the authors construct for any given knot or link type, a particular type of static solution to the inviscid Euler equation on Euclidean 3-space (a “Beltrami flow”) which has among its integral curves one which realizes this knot or link type. As a result, they get *a single flow which contains all knot types*, which is a special form of Lord Kelvin’s conjecture.

In the paper by Marcel Guardia, Pau Martín and Tere M. Seara, the authors prove the existence of oscillatory solutions in the restricted planar circular 3 body problem *for any value of the mass ratio* of the primaries, which had been open since Chazy’s 1920s work pointed out oscillatory motion as one possible final behavior of the N-body motion.

Felicitem molt efusivament als guardonats i agraïm al Professor Carles Simó pel mecenatge del premi i al jurat per la feina feta durant tot el procés.

Xavier Jarque i Ribera
President de la Societat Catalana de Matemàtiques