

# FROM COOLING TO EXPLOSION: THE PHYSICS OF WHITE DWARFS

## Final Program

**Wednesday, June 14**

**18:00:** Buses leave Barcelona [from the IEEC Headquarters] to Tossa

**20:30:** Dinner at the Hotel Reymar

**Thursday, June 15**

### **9:00 – 10:40 White Dwarfs: Cooling and Explosion**

9:00-9:25 **Maurizio Salaris** (Liverpool) – White dwarfs in globular clusters: present and future

9:25-9:50 **Enrique García-Berro** (Barcelona) – White dwarf cooling: now and then

9:50-10:15 **Domitilla De Martino** (Naples) – Magnetic accreting white dwarfs

10:15-10:40 **Domingo García-Senz** (Barcelona) – Surface detonations in rotating white Dwarfs

### **10:40 – 11:15 Coffee Break**

### **11:15 – 13:20 Novae and Cataclysmic Variables (I)**

11:15-11:40 **Sumner Starrfield** (Tempe) – Contributions of Margarita Hernanz to Theoretical studies of classical novae

11:40-12:05 **Mike Bode** (Liverpool) – RS Ophiuchi: the many faces of a remarkable nova

12:05-12:30 **Matt Darnley** (Liverpool) – The remarkable recurrent novae!

12:30-12:55 **Mike Shara** (New York) – An HST ultraviolet survey for rapidly recurring novae in M87

12:55-13:20 **Alain Coc** and **Nicolas de Séréville** (Orsay) – Nuclear Physics aspects of nova nucleosynthesis

### **13:20 – 15:30 Lunch & Break**

### **15:30 – 17:35 Novae and Cataclysmic Variables (II)**

15:30-15:55 **Vincent Tatischeff** (Orsay) – Novae as particle accelerators

15:55-16:20 **Julian Osborne** (Leicester) – Overview of SWIFT observations of novae

16:20-16:45 **Kim Page** (Leicester) – Recent highlights of SWIFT observations of novae

16:45-17:10 **Alessandro Ederoclite** (Teruel) – Cataclysmic variables in narrow-band, wide-field photometric surveys

17:10-17:35 **Solen Balman** (Ankara) – Reanalysis of high-resolution XMM-Newton data of V2491 Cygni using hot/warm absorber models

### **17:35 – 18:05 Coffee Break**

### **18:05 – 19:20 Neutron stars, Magnetars and Pulsars**

18:05-18:30 **Nanda Rea** (Bellaterra) – The neutron star zoo

18:30-18:55 **Diego Torres** (Bellaterra) – Of magnetars and nebulae  
18:55-19:20 **Manuel Linares** (Barcelona) – Compact binary millisecond pulsars

**20:30 – 21:30 Dinner**

**21:30 – 22:30 Special session “Hernanzfest”**

**Friday, June 16**

**9:00 – 11:05 Gamma-rays**

9:00-9:25 **Jurgen Knödlseher** (Toulouse) – The future of gamma-ray astronomy  
9:25-9:50 **Peter von Ballmoos** (Toulouse) – Instruments for gamma-ray emission  
9:50-10:15 **Mark Leising** (Clemson) – When will classical nova gamma-ray lines be detected?  
10:15-10:40 **Roland Diehl** (Garching) – Gamma-ray line constraints on white dwarf astrophysics  
10:40-11:05 **Robert Mochkovitch** (Paris) – 1992-2017: 25 years of GRB Physics

**11:05 – 11:35 Coffee Break**

**11:35 – 12:50 Astrophysical Instrumentation**

11:35-12:00 **Søren Brandt** (Kongens Lyngby) – All-sky and wide field X- and gamma-ray monitors: a historical overview  
12:00-12:25 **José Luis Galvez** (Bellaterra) – Towards the X-ray and gamma-ray nuclear instrumentation for Astrophysics  
12:25-12:50 **José Manuel Alvarez** (Salamanca) – A laser-driven source to reproduce the space radiation environment

**13:00 – 15:00 Lunch & Break**

**15:00 – 16:15 Novae... and anti-novae**

15:00-15:25 **Jan-Uwe Ness** (Madrid) – What we can and cannot learn from X-ray grating spectra of supersoft sources  
15:25-15:50 **Martin Henze** (Barcelona) – Breaking the habit: the peculiar 2016 eruption of the remarkable nova M31N 2008-12a  
15:50-16:15 **Pablo Rodríguez-Gil** (Santa Cruz de Tenerife) – Anti-novae: probing the Invisible

**16:15 – 16:30 Concluding remarks**

**Mike Shara** (New York)

**17:30** Buses leave from Tossa toward Barcelona (stops: Barcelona Pl. Catalunya and Barcelona’s airport)