

Session 9, Computational Methods in Algebra and Analysis

Wednesday 18, Room 306

- 15:30–16:30 **How to use exterior algebras in elimination theory**
David Eisenbud
- 16:30–17:00 **Balanced configurations and rational hypergeometric functions**
Eduardo Cattani
- 17:30–18:00 **Determinantal formulas for resultants in low dimension**
Amit Khetan
- 18:00–18:30 **Classical and modern approaches to bivariate hypergeometric systems**
Alicia Dickenstein
- 18:30–19:00 **Computational K-theory for polynomial rings over Dedekind domains**
Manuel Jesús Gago Vargas
- 19:00–19:30 **Computational methods for rational curves and surfaces**
Juan Rafael Sendra Pons
- 19:30–20:00 **Computer algebra and computer aided geometric design**
Laureano González-Vega

Thursday 19, Room 306

- 18:30–19:30 **Algorithms for the ring of differential operators and their applications**
Nobuki Takayama
- 19:30–20:00 **Hypergeometric systems and local cohomology**
Laura Felicia Matusevich

Friday 20, Room 306

- 10:30–11:30 **Poincaré series, topology and cyclotomic factors**
Antonio Campillo
- 11:30–12:00 **On Bernstein-Sato ideals**
José María Ucha Enríquez
- 12:00–12:30 **Explicit calculation of slopes in hypergeometric systems**
María Isabel Hartillo Hermoso
- 12:30–13:00 **Finite dimensional representations of invariants under tori of the Weyl algebra**
Sonia L. Rueda Pérez
- 13:00–13:30 **Stratifications induced by homomorphisms between holonomic sheaves**
Uli Walther

Saturday 21, Room 306

08:30–09:00 **Computing with locally effective matrices**

Julio Jesús Rubio García

09:00–09:30 **Computation of Ratliff-Rush closure**

Juan Elías