

EACA – 2012

XIII Encuentro de Álgebra Computacional y Aplicaciones

June 13th–15th, 2012. Alcalá de Henares (Madrid), Spain



Program



| Wednesday, June 13 | |
|---------------------------|---|
| 9:30-9:50 | Opening Ceremony at Paraninfo of the University |
| 10:00-10:55 | A. Dickenstein ROOM A Computational algebraic geometry and biochemical reaction networks Chair: I. Bermejo |
| 11:00-11:25 | Coffee Break |
| | ROOM A (Chair: I. Bermejo) ROOM B (Chair: M.E. Alonso) |
| 11:30-11:55 | J. Caravantes Antena Margarita y hodografos pitagóricos planos nodales |
| 12:00-12:25 | J.M. Casas, M.A. Insua, M. Ladra, S. Ladra Effective computation of Hom-Leibniz homology |
| 12:30-12:55 | M. Ceballos, J. Núñez, A.F. Tenorio New advances in the description of filiform Lie algebras |
| 13:00-15:00 | Lunch |
| 15:00-15:55 | M. I. González ROOM A Private set intersection: the problem, some solutions, and what to do if size matters Chair: J. Rubio |
| | ROOM A (Chair: J. Rubio) ROOM B (Chair: S. Rueda) |
| 16:00-16:25 | J. Saludes, S. Xambó Toward multilingual mechanized mathematics assistants |
| 16:30-16:55 | I. Márquez-Corbella, E. Martínez-Moro Efficient computation of the set of codewords of minimal support |
| 16:30-16:55 | Coffee Break |
| 17:00-17:25 | F. Botana, M.A. Abánades A demo on using the Gröbner Cover algorithm for dynamic geometry tasks |
| 17:30-17:55 | I. Márquez-Corbella, E. Martínez-Moro, E. Suárez-Canedo Construcciones minimales asociadas a códigos concatenados generalizados |
| 17:30-17:55 | A. Montes Using Kapur-Sun-Wang Algorithm for the Gröbner Cover |
| 17:30-17:55 | J. A. Armario On two open problems in Hadamard matrices |
| 18:00-18:25 | F. Botana, Z. Kovács, S. Weitzhofer/ Z. Kovács, T. Recio, S. Weitzhofer Implementing theorem proving in GeoGebra by <ul style="list-style-type: none"> • using a Singular webservice • exact check of a statement in a bounded number of test cases |
| 18:00-18:25 | R.M. Falcón The compressed shape of a partial latin rectangle |
| 19:00-19:30 | Guided tour of the Chapel of San Ildefonso |

| Thursday, June 14 | |
|--------------------------|--|
| 9:30-10:25 | D. Cox ROOM A Gröbner Bases: Quick Updates and Extended Snapshots Chair: T. Recio |
| 10:30-10:55 | ROOM A (Chair: T. Recio) J.W. Hoffman, H. Wang Quadratically parametrized surfaces |
| | ROOM B (P. Gimenez) F. Santos, L.F. Tabera, T. Theobald On the separation of tropically convex sets |
| 11:00-11:25 | Coffee Break |
| | ROOM A (Chair: T. Recio) ROOM B (P. Gimenez) |
| 11:30-11:55 | M. Peternell, D. Gruber, J. Sendra Rational conchoidal surface construction |
| | I. Bermejo, I. García Marco, E. Reyes Complete intersection toric ideals associated to graphs |
| 12:00-12:25 | S. Pérez-Díaz, J.R. Sendra, C. Villarino On the singular locus of rational surface parametrizations |
| | E. Sáenz-De-Cabezón, H. P. Wynn Algebraic analysis of two-terminal networks |
| 12:30-12:55 | A. Ibrahim, M. Fioravanti, L. González-Vega Computing parametrizations of the bisector of two surfaces |
| | I. Bermejo, E. García-Llorente Castelnuovo-Mumford regularity of projective monomial curves associated to arithmetic sequences |
| 13:00-15:00 | Lunch |
| 15:00-15:55 | W. A. de Graaf ROOM A Computing with algebraic groups Chair: J. Gómez |
| | ROOM A (Chair: P. Gómez) ROOM B (Chair: M. Ladra) |
| 16:00-16:25 | C. Dönch Border bases for ideals in the ring of difference operators respecting orthant decompositions |
| | C. Tonelli F4 algorithm with the F5's criteria |
| 16:30-16:55 | Coffee Break |
| 17:00-17:25 | S. L. Rueda Differential resultants of super essential systems of linear OD-polynomials |
| | J. Heras, F.J. Martín-Mateos, V. Pascual An ACL2 formalization of algebraic structures |
| 17:30-17:55 | M.C. Fernández-Fernández On a family of A-hypergeometric systems with exponential rank jump |
| | J. Aransay, J. Divasón Formalizing an abstract algebra textbook in Isabelle/HOL |
| 18:10 | Group Photo |
| 18:15-20:15 | Guided tour of the historic center of Alcalá |
| 21:30 | Social Dinner: Restaurante “La Esquina Complutense” C/ Angel 1 y 3- Vía Complutense 33 (Alcalá) |

| Friday, June 15 | | |
|------------------------|---|---|
| 9:30-10:25 | F. Winkler ROOM A The role of symbolic computation in mathematics Chair: F. Castro | |
| | ROOM A (Chair: F. Castro) ROOM B (Chair: A. Montes) | |
| 10:30-10:55 | M. Narváez Clauss On the height of a rational parametrization of a plane algebraic curve | O. Cortadellas, F.J. Lobillo, G. Navarro Prime fuzzy ideals over noncommutative rings |
| 11:00-11:25 | Coffee Break | |
| 11:30-11:55 | J. G. Alcázar, M. Díaz Toca On the shape of curves which are rational in polar coordinates | A.M. Robles-Pérez, J.C. Rosales The Frobenius problem in dimension three |
| 12:00-12:25 | J. Amorós, I. Berna Sepúlveda Monodromía geométrica en familias de curvas de género 4 | M. Bras-Amorós, A. Vico-Oton On non-homogeneous patterns on numerical semigroups |
| 12:30-13:25 | J. Gómez-Torrecillas Some computational problems in noncommutative polynomials Chair: A. Montes | |
| 13:30-13:45 | Closing of the conference | |
| 13:45 | Lunch | |

Important information

WIFI: In Room A and in Room B you can access to wireless networks with the following information:

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| Name of the wifi: sala3M |
| Password: rectorado2010 |
| Name of the wifi: eaca2012 |
| Password: eaca_2012_uah |

Lunch: lunch will take place in the cafeteria every day. The cafeteria is in the contiguous court to the conference rooms.

Wednesday, June 13

Guided tour of the Chapel of San Ildefonso

Meeting point: See map in page 6

Time: 19:00 h.

Duration: 30 minutes (aprox.)

Thursday, June 14: Group Photo

Meeting point: See map in page 6

Time: 18:10 h.

Duration: 5minutes (aprox.)

Thursday, June 14

Guided tour of the historic center of Alcalá

Meeting point: See map in page 6

Time: 18:15 h.

Duration: 2 hours (aprox.)

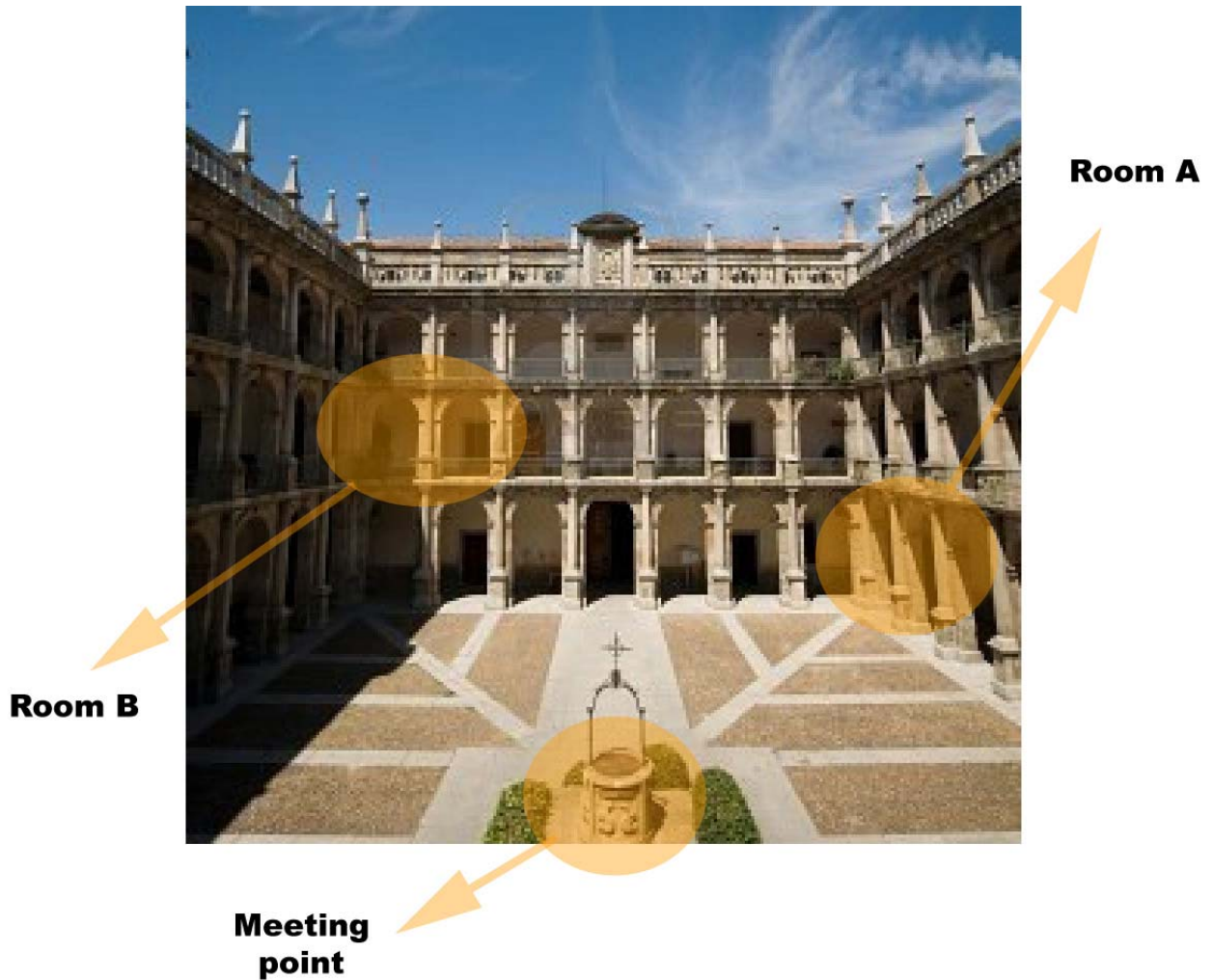
Thursday, June 14: Social Dinner

Restaurante “La Esquina Complutense”

C/Angel 1 y 3- Via Complutense 33

Meeting point: See map in page 6

Time: 21:00



Meeting Point:

Guided tour of the Chapel of San Ildefonso: Wednesday, June 13. 19:00 h.

Group Photo: Thursday, June 14. 18:10 h.

Guided tour of the historic center of Alcalá: Thursday, June 14. 18:15 h.

Social Dinner: Thursday, June 14. 21:00 h



Social Dinner:

Restaurant "El Cenador". Adress: C/ Angel 1 y 3 - Vía Complutense nº 33 - 28807

P: Parking