

# Intensive Research Program on DISCRETE, COMBINATORIAL AND COMPUTATIONAL GEOMETRY



Barcelona (Spain)

April 16 – May 18 2018

# Barcelona IRP on DCCG



Bellaterra Campus

# Organization

## Local organization

- **Vera Sacristán** (UPC, Spain)
- **Rodrigo Silveira** (UPC, Spain)
- **Host: Centre de Recerca Matemàtica (CRM)** (Bellaterra, Spain)

## Scientific committee

- **Oswin Aichholzer** (TU Graz, Austria)
- **Prosenjit Bose** (Carleton U, Canada)
- **Erik Demaine** (MIT, USA)
- **Clemens Huemer** (UPC, Spain)
- **Joe Mitchell** (Stony Brook U, USA)
- **János Pach** (EPFL Lausanne, Switzerland and Renyi Institute Budapest, Hungary)
- **Vera Sacristán** (UPC, Spain) (coordinator)
- **Rodrigo Silveira** (UPC, Spain)

# Core of Intensive Research Program

Full (open) package

Package 1-2(-3)

Algorithmic geometry  
& applications

Package (3-)-4-5  
Combinatorial &  
discrete geometry

Week 1 April 16-20	Week 2 April 23-27	Week 3 April 30-May 4	Week 4 May 7-11	Week 5 May 14-18
Advanced Course I Advanced Techniques for Algorithmic Geometry	Inspiring Lectures I Computational Geometry Towards Applications	Hands-on on geometric software	Advanced Course II New Results in Combinatorial & Discrete Geometry	Inspiring Lectures II Challenges in Combinatorial & Discrete Geometry
W o r k i n g   &   i n t e r a c t i n g				
Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar
Student seminar	Student seminar	Student seminar	Student seminar	Student seminar

# Speakers: Advanced Course I

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Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar
Student seminar	Student seminar	Student seminar	Student seminar	Student seminar

Speakers:

- [Erin Wolf Chambers](#) (Saint Louis University)
- [Nabil Mustafa](#) (ESIEE Paris)

# Speakers: Inspiring Lectures I

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Advanced Course I	Inspiring Lectures I	Advanced Course I	Advanced Course II	Inspiring Lectures II
Advanced Techniques for Algorithmic Geometry	Computational Geometry Towards Applications	Hands-on on	New Results in	Challenges in
Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar
Student seminar	Student seminar	Student seminar	Student seminar	Student seminar

- Speakers:
- [Sergio Cabello](#) (University of Ljubljana)
  - [Erik Demaine](#) (MIT)
  - [Tamal Dey](#) (The Ohio State University)
  - [Vida Dujmovic](#) (University of Ottawa)
  - [Dan Halperin](#) (Tel Aviv University)
  - [Marc van Kreveld](#) (Utrecht University)

# Speakers: Geometric Software

Full (open) package

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Advanced Course I Advanced Techniques for Algorithmic Geometry	Inspiring Lectures I Computational Geometry Towards Applications	Hands-on on geometric software		
Weekly seminar	Weekly seminar	Weekly seminar		
Student seminar	Student seminar	Student seminar	Student seminar	Student seminar

Speakers:

- [Andreas Fabri](#) (CGAL / Geometry Factory)
- [Zoltan Kovacs](#) (GeoGebra / Johannes Kepler Univ.)
- [Nicolai Hähnle](#) (OpenGL / AMD)
- [Michael Joswig](#) (Polymake / TU

Berlin)

# Speakers: Geometric Software

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Advanced Course I	Inspiring Lectures I		Advanced Course II	Inspiring Lectures II
Advanced Techniques	Computational	Hands-on on	New Results in Combinatorial & Discrete Geometry	Challenges in Combinatorial & Discrete Geometry
Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar	Weekly seminar
Student seminar	Student seminar	Student seminar	Student seminar	Student seminar

Speakers:

- [Bojan Mohar](#) (Simon Fraser University & University of Ljubljana)
- [Gelasio Salazar](#) (Univ. Autónoma San Luis Potosí)

# Speakers: Geometric Software

Full (open) package

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Advanced Course I	Inspiring Lectures I		Advanced Course II	Inspiring Lectures II
Advanced Course I				Challenges in Combinatorial & Discrete Geometry
Techniques of Algorithmic Geometry				
Weekly seminar				Weekly seminar
Student seminar	Student seminar	Student seminar	Student seminar	Student seminar

Speakers:

- [Karim Adiprasito](#) (Hebrew University of Jerusalem)
- [Imre Bárány](#) (Hungarian Academy of Sciences)
- [Alexander Barvinok](#) (University of Michigan)
- [Fabrizio Frati](#) (Università Roma Tre)
- [Adam Sheffer](#) (California Institute of Technology)
- [Csaba D. Tóth](#) (California State University Northridge)

# Venue: Centre de Recerca Matemàtica

Bellaterra Campus



# Transportation & Accommodation

- CRM: well-connected by public transport to Barcelona city center
  - Train ride from Plaça Catalunya: 34 min
- Very convenient accommodation in campus



# Campus accommodation

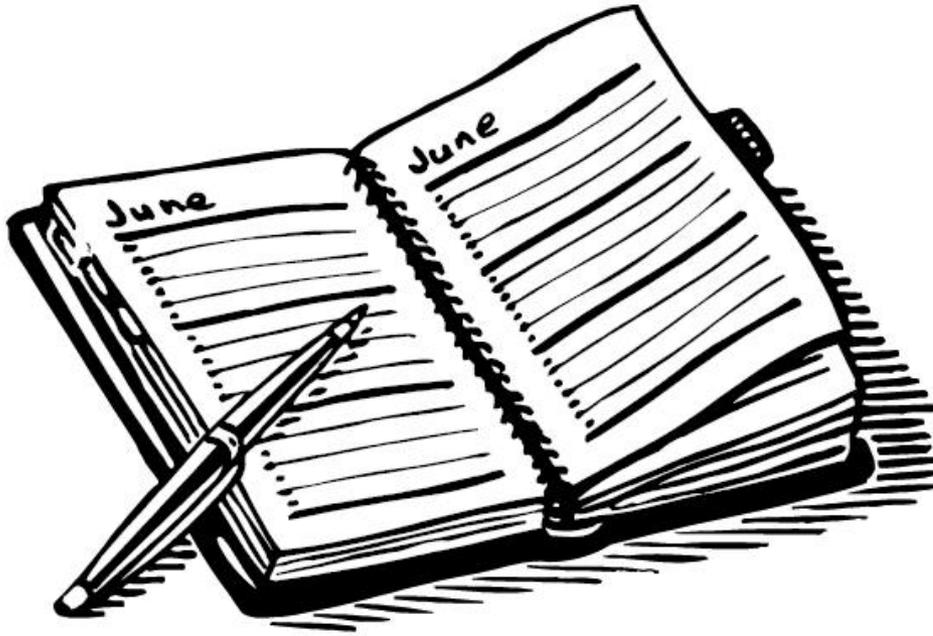
- Expected prices for double room:  
1 week: € 372  
2 weeks: € 507  
5 weeks: € 1,120



# Registration fees

- Estimation
  - 50-100 € per week
- 5-week accommodation & registration grants for young researchers and PhD students
- Figures subject to final support from sponsors

# Book the dates!



**April 16-May 18 2018  
Barcelona**

**Intensive Research  
Program in Discrete,  
Combinatorial, and  
Computational  
Geometry!**

More info: [dccg.upc.edu](http://dccg.upc.edu)