# Proposal for Vertex 2011/2012

### Benasque, Huesca, Spain



http://www.benasque.org/

# Benasque

 Benasque is a little village of 1400 inhabitants located at the heart of the Spanish Pyrenees. During winter the slopes of Cerler (4 km from Benasque) transforms the valley of Benasque into a ski resort. The village preserves buildings from the gothic period (Palacio de Ribagorza, XIV century) and a charming atmosphere. During summer Benasque turns into a crowded vacation spot. Visitors can choose among a large number of hikes and sports.





### Centro de Ciencias de Benasque Pedro Pascual (CCBPP)

- The Centro de Ciencias de Benasque Pedro Pascual (CCBPP) operates as an advanced research institute located in the heart of the Spanish Pyrenees. The aim of CCBPP is to offer an agreeable atmosphere for professional researchers to meet and carry out their work.
- The CCBPP runs on a proposed topic for a period of time that ranges from one to three weeks. Discussion groups and talks are organized by scientific advisors and by participants themselves. The CCBPP is designed to attract around 160 researchers at a time. Upon request, some collaborating teams are accepted.
- The CCBPP offers some basic infrastructure that includes seminar rooms, plenty of blackboards, desk space, a full secretariat service and computer facilities. Participants are encouraged to bring their own notebooks and connect via wifi.
- The organization takes care of hosting and maintaining the web for each working sessions. It also centralizes the accommodation of participants. The CCBPP is a non-profit institution entitled to handle any extra funds obtained by organizers.
- The center is financially supported by MICINN, CSIC, Gobierno de Aragón, Universidad de Zaragoza and Fundación BBVA.
- Director of CCBPP already contacted, happy to host Vertex: "Vertex is a conference well suited for the spirit of CCBPP, since it maintains the criteria of excellence and internationalism that govern the Centre."

# The CCBPP offers the following help to scientific organizers:

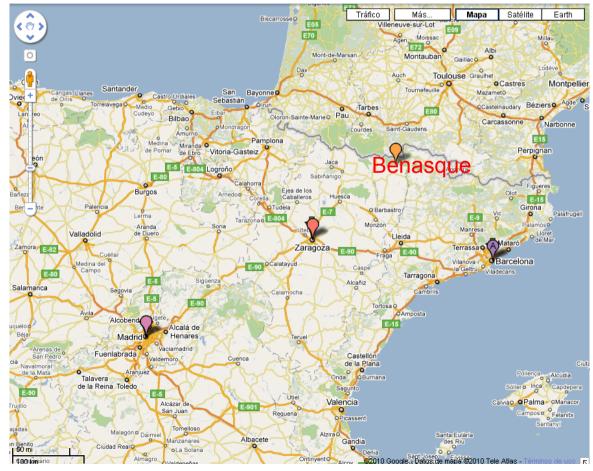
- Facilities
  - Desk space and ubiquous blackboards.
  - A computer room with 4 linux PCs, 3 Windows PC and 3 Macs and two heavy dutty printers.
  - Wireless connection
  - Auditorium for 150 people that can be divided in three independent seminar rooms.
  - Secretariat: Fax, telephone, Xerox, scan.
- Administration
  - Web page support including automatic registration (which is required for all participants).
  - Web handling of hotel and apartment reservations.
  - Local support: system manager, secretariat.
- Financial support from FCCB
  - Infrastructure expenses (secretary, web page, system manager, venue)
  - Organized bus Barcelona-Benasque-Barcelona.
  - Scientific organizers expenses.

# Accommodation

- Benasque offers many different types of accommodation at prices that range from low to high. The choice goes from \* to \*\*\*\* Hotels.
- Country homes and cabins and rented apartments also available
- Hotel reservations are handled by the CCBPP

# How to arrive

- We suggest flying to Barcelona, Madrid (most airlines) or Zaragoza (Ryanair)
- From Barcelona: 297km (approx. 4h)
- From Zaragoza: 218 km (approx. 3h15m)
- The trip is definitely scenic as the last part of the trip goes through the Pyrenees valleys
- Organized bus: the Center offers free bus transportation from Barcelona airport and center to Benasque, the trip takes 6h.



## Availability 2011



#### Unsolved problems in Astrophysics and Cosmology 2011, February 14 - February 18

H. Peiris (U. College London), R. Jiménez (ICREA, ICC, U. Barcelona), Carlos (m. c - 1 Pena-Garay (IFIC, CSIC, U. Valencia)



Art and Science 2011, June 5 - June 10

Engineering the Eve III

(National Univ., Ireland)

A. Nieto (Inst. Neurociencias, Alicante)



2011, June 9 - June 13 Pablo Artal (U. Murcia), David R Williams (U. Rochester, USA), Chris Dainty



Quantum Information 2011, June 12 - July 1

I. Cirac (MPI, Garching), A. Ekert (U. Oxford/NUS Singapore)



String Theory 2011, July 3 - July 15 J. Gomis (Perimeter Institute), A. Strominger (Harvard U.)



#### Quantum transport in dilute gases 2011, July 3 - July 16

G. Shyapnikov (U. Amsterdam), F. Sols (U. Complutense Madrid)



Gravity 2011, July 17 - July 29 R. Emparan (U. Barcelona)



Workshop on higher rank L-functions: Theory and Computations 2011, July 25 - August 6

F. Rodríguez-Villegas (UT Austin), K.Belabas (U. Bordeaux I), J-M. Couveignes (U. Toulouse)



Partial differential equations 2011, August 28 - September 9

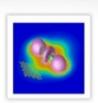
G. Buttazzo (U. Pisa), E. Zuazua (BCAM)



Quantum Field theory under the influence of external conditions 2011, September 18 - September 24

M. Asorey (U. Zaragoza), M. Bordag (U. Leipzig)

### Availability 2012



5th Time-Dependent Density-Functional Theory. Prospects and Applications 2012, January 8 - January 21

E. K. U. Gross (Freie U. Berlin), M. A. L. Marques (U. Lyon I), F. Nogueira (U. Coimbra and CFC), A. Rubio (U. Pais Vasco), A. Castro (U. Zaragoza)



Networking tensor networks: many-body systems and simulations 2012, May 7 - May 18

R. Orús (MPQ, Garching), M. C. Bañuls (MPQ, Garching)



VI International Summer School on Geometry, Mechanics and Control 2012, July 2 - July 7

E. Martinez (Zaragoza University)



RNA 2012, July 22 - August 3

# **Pictures**

### The CCBPP



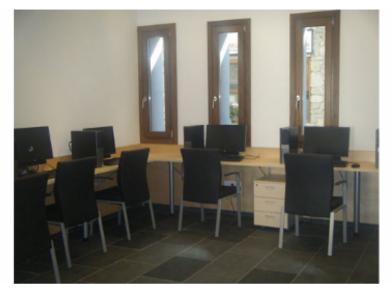






### The CCBPP









### Benasque and surroundings





