

ESF Exploratory Workshop on

***Interfaces of Noncommutative
Geometry with the Representation
Theory of Hopf Algebras and
Artin Algebras***

Istanbul (Turkey), 6-11 August 2012

Convened by:

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Co-sponsored by

Boğaziçi University and Istanbul Center for Mathematical Sciences (IMBM)



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Main Objectives of the Workshop:

The theory of finite dimensional Hopf algebras, and the study of Hopf algebras arising from physics, such as various quantum groups reside in their separate spheres apparently for no reason. Both subjects will benefit from the representation theory of Artin algebras as this theory is known for its remarkable computational successes thanks to the recent advances in symbolic computation. Introducing the computational and theoretical tools used in the representation theory of Artin algebras, and we expect that popularizing the feature-rich structures coming from Hopf algebras to a new group of algebraists will open up exciting, unexplored avenues of research.

PRELIMINARY PROGRAMME

Sunday 6 August 2012

Afternoon *Arrival*

Monday 7 August 2012

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| 09.10-09.15 | Welcome by Convenor
A. Kaygun (Bahçeşehir University, Istanbul, Turkey) |
| 09.15-09.35 | Presentation of the European Science Foundation (ESF)
T. Lery (Standing Committee for Physical and Engineering Sciences - PESC) |
| 09.45-12:00 | Morning Session |
| 09.45-10.45 | Presentation 1
G. Boehm (Wigner Research Centre for Physics, Budapest, Hungary) |
| 10.45-11.00 | <i>Coffee / Tea Break</i> |
| 11.00-12.00 | Presentation 2
D. Stefan (University of Bucharest, Romania) |
| 12.00-13.30 | <i>Lunch</i> |
| 13.30-17:00 | Afternoon Session |
| 14.00-14.30 | Presentation 1
L. El Kaoutit Zerri (University of Granada, Spain) |
| 14.30-14.45 | <i>Coffee / tea break</i> |
| 14.45-15.45 | Presentation 2
S. Caenepeel (Vrije Universiteit Brussel, Belgium) |
| 15:45-16.00 | <i>Coffee / tea break</i> |
| 16.00-17:00 | Discussion |

Tuesday 8 August 2012

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| 09.45-12:00 | Morning Session |
| 09.45-10.45 | Presentation 1
M. Siles Molina (University of Malaga, Spain) |
| 10.45-11.00 | <i>Coffee / Tea Break</i> |

11.00-12.00	Presentation 2 K. Goodearl (University of California, Santa Barbara, USA)
12.00-13.30	<i>Lunch</i>
13.30-17:00	Afternoon Session
14.00-14.30	Presentation 1 L. Le Bruyn (University of Antwerp, Belgium)
14.30-14.45	<i>Coffee / tea break</i>
14.45-15.45	Presentation 2 B. Huisgen-Zimmermann (University of California, Santa Barbara, USA)
15:45-16.00	<i>Coffee / tea break</i>
16.00-17:00	Discussion

Wednesday 9 August 2012

09.45-12:00	Morning Session
09.45-10.45	Presentation 1 N. Kowalzig (university of Granada, Spain)
10.45-11.00	<i>Coffee / Tea Break</i>
11.00-12.00	Presentation 2 A. Ardizzoni (Universite degli Studi di Torino, Italy)
12.00-13.30	<i>Lunch</i>
13.30-17:00	Afternoon Session
14.00-14.30	Presentation 1 E. Burgunder (Université Paul Sabatier, Toulouse, France)
14.30-14.45	<i>Coffee / tea break</i>
14.45-15.45	Presentation 2 C. Menini (University of Ferrara, Italy)
15:45-16.00	<i>Coffee / tea break</i>
16.00-17:00	Discussion

Thursday 10 August 2012

09.45-12:00	Morning Session
09.45-10.45	Presentation 1 K. Worytkiewicz (Savoie University, Le Bourget du Lac, France)
10.45-11.00	<i>Coffee / Tea Break</i>
11.00-12.00	Presentation 2 Z. Skoda (Inst. Ruder Boscovic, Zagreb, Croatia)
12.00-13.30	<i>Lunch</i>

13.30-17:00	Afternoon Session
14.00-14.30	Presentation 1 G. Sharygin (Moscow State University, Russia)
14.30-14.45	<i>Coffee / tea break</i>
14.45-16.15	Discussion (including follow-up activities)
16.15	<i>End of Workshop</i>

Friday 11 August 2012

Morning *Departure*

European Science Foundation

Objectives of the ESF Standing Committee for Physical and Engineering Sciences (PESC)

The **ESF Standing Committee for Physical and Engineering Sciences (PESC)** covers a broad number of fields from physics, chemistry, mathematics, informatics and computer sciences, to engineering, material and technical sciences. PESC has the following responsibilities and tasks:

- to develop scientific initiatives within the ESF operational framework;
- to make proposals for 'a la carte' scientific initiatives;
- to undertake studies on large research facilities and assist in the evaluations and assessments and other special reviews requested by Member Organisations;
- to provide specialist advice and input on a wide range of ESF actions and contribute to the development of the ESF science policy agenda and take a strategic view of the scientific area for which it has responsibility; and
- where appropriate, to work with other Committees and groups in promoting multidisciplinary and interdisciplinary activities.

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