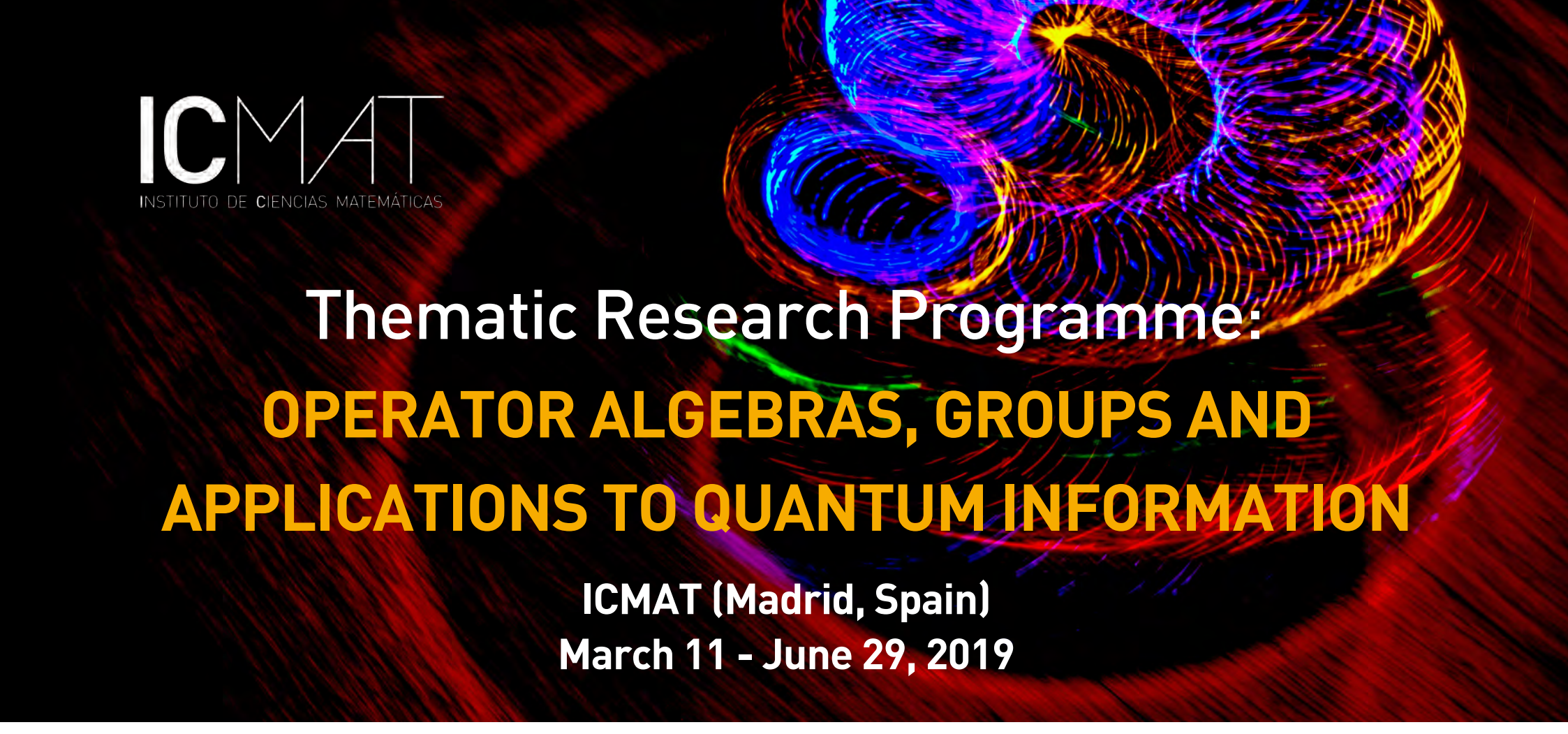

ICMAT
INSTITUTO DE CIENCIAS MATEMÁTICAS

Thematic Research Programme:

OPERATOR ALGEBRAS, GROUPS AND APPLICATIONS TO QUANTUM INFORMATION

ICMAT (Madrid, Spain)
March 11 - June 29, 2019

SCHOOL I: OPERATOR ALGEBRAS AND GROUPS

Inaugural Colloquium: **Joachim Cuntz** (WWU-Münster)
Wednesday, March 13, 2019

The ring of integers and C*-algebras

Among the most basic structures in mathematics are the sets of natural numbers and of integers with their operations of addition and multiplication. These structures give rise, in a completely natural way, to C*-algebras with intriguing properties. The study of these C*-algebras and in particular of their K-theoretical invariants reveals close connections with algebraic number theory. These connections can be extended, from the usual ring of integers to rings of algebraic integers in number fields.

Course I: **Stefaan Vaes** (KU Leuven, Belgium)

Type III factors, free Araki-Woods factors and their (non-)classification

Course II: **Tullio Ceccherini-Silberstein** (U. Sannio, Italy)

Amenability of groups

Course III: **Hannes Thiel** (WWU-Münster, Germany)

Structure and classification of amenable C*-algebras

Organizing committee:

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Diego Martínez (UC3M-ICMAT)
Carlos Palazuelos (UCM-ICMAT)
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More information: https://www.icmat.es/RT/2019/OAGAQI/index.php
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