

# Configuration Spaces and Applications

CIMPA - School of Mathematical Sciences - National Center for Mathematics

Lahore 2007

- **Objectives of the School**

The aim of this School is to introduce the students to the theory of configuration spaces, some classical and new results in this field, and to the many applications of these in real life. This is also meant to open to the PhD students new important areas of research in geometry and topology.

- **Organizers**

B. Berceanu (Institute of Mathematics, Bucharest, Romania), A.D.R. Choudary (SMS, Lahore, Pakistan), A. Dimca (Université de Nice, France) S. Kallel (Université de Lille, France).

- **Working language** English

- **Date and location** February 12- 19, 2007, School of Mathematical Sciences, Lahore, Pakistan

- **Scientific programme**

Our preliminary plan contains five mini-courses:

1. Basic properties of configuration spaces
2. Configuration spaces and algebraic varieties
3. Mixed Hodge structures and fundamental groups
4. Configuration spaces and persistent homology
5. Algebraic geometry and robotics

- **Prerequisites**

The school is open to all mathematicians working in pure and applied mathematics. A previous familiarity with algebraic topology and algebraic geometry would be very useful.

Applicants from Pakistan should send their applications to the local coordinator: *Dr. A.D.R. Choudary, Director General*, School of Mathematical Sciences, GC University, Lahore, Pakistan. Phone: +92-42-9231189, Fax: +92-42-9231315, E-mail: choudary@cwu.edu