

# Quantum Groups and 3-Manifold Invariants

Temas da Matemática Contemporânea - IMPA, Rio de Janeiro, de 05/09 até 07/09.

## Program

<b>Wednesday, 05</b>			<b>Thursday, 06</b>			<b>Friday, 07</b>		
09:00 - 10:00 Check in								
10:00 - 11:00 <b>Christopher Douglas (Oxford)</b> Topological field theory in dimensions 1 and 2			09:00 - 10:00 <b>Christopher Douglas (Oxford)</b> Braided tensor categories and braided Hopf algebras			09:00 - 10:00 <b>André Henriques (Utrecht)</b> Ribbon Hopf algebras and ribbon categories		
11:30 - 12:30 <b>Christopher Douglas (Oxford)</b> Extended field theories in dimension 3, tensor categories, and Hopf algebras			10:30 - 11:30 <b>André Henriques (Utrecht)</b> The quantum group and its modules			10:30 - 11:30 <b>André Henriques (Utrecht)</b> Quantum dimension and the fusion category of a quantum group		
<b>Lunch</b>								
14:30 - 15:30 <b>André Henriques (Utrecht)</b> Lie algebras and their representations			13:30 - 14:30 <b>André Henriques (Utrecht)</b> The braided structure on the quantum group			12:45 - 13:45 <b>Christopher Douglas (Oxford)</b> 3-manifold invariants from the fusion category		
<b>Coffee</b>								
16:00 - 17:00 <b>André Henriques (Utrecht)</b> Deformation of the universal enveloping algebra of a Lie algebra			15:00 - 16:00 <b>Christopher Douglas (Oxford)</b> The ribbon structure on the fusion category			14:00 - 15:00 <b>Christopher Douglas (Oxford)</b> Modularity of the fusion category		