Sharp weighted bounds — the $A_2$ theorem and beyond

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Thursday 25  15:30 - 17:30  Instituto de Ciencias Matemáticas
Friday 26  10:00 - 12:00  Campus de Cantoblanco
Monday 29  10:00 - 12:00  Aula Naranja
Tuesday 30  10:00 - 12:00

Abstract:

The $A_2$ theorem is a sharp estimate for the norm of singular integral operators on weighted spaces. The original proof was probabilistic and quite complicated, but the aim of the course is to present a simpler non-probabilistic approach that was found last year. This approach also allows to push the applicability of the $A_2$ theorem to a bigger class of operators than before. We will also discuss some open problems concerning how far it still can be pushed.