Seminari Informal
de Matemàtiques de Barcelona

Speaker: Tommaso Bruno.
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Data: dilluns, 16 de juny de 2014.
Horari: 17:45, *coffee break*; 18:00, xerrada.
Lloc: Aula IMUB (al terrat), Facultat de Matemàtiques de la UB.

Títol: Restricted and unrestricted weak type operators on Lorentz spaces.
Resum:

Many important operators in harmonic analysis are not bounded when acting between certain function spaces, and only satisfy a boundedness inequality if restricted to characteristic functions of measurable sets. We shall study when this restricted property is equivalent to a stronger type of boundedness of the operator. Lorentz spaces arise as the natural context for these problems and a brief introduction will be worthwhile; we will also show that the measure space on which they are considered strongly influences the behaviour of the operator. In particular, we shall focus on restricted weak type (1,1) that turns out to be the critical and most interesting case. Many positive and few negative results have been proved but in some situations optimal conditions are still unknown. In the hope of receiving useful suggestions, some open questions will be presented at the end.

Qui som? El SIMBa és un seminari jove organitzat per estudiants de doctorat de matemàtiques. Està dirigit a estudiants de doctorat, de màster i, fins i tot, dels darrers cursos de grau. El nostre objectiu és donar a conèixer la recerca que estem fent, així com adquirir coneixements d'altres àrees de les matemàtiques diferents de la pròpia.
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