

**Publicacions més rellevants de la línia de recerca:
Teories de la interpolació i l'extrapolació**

Referència: Carro, M.J. From restricted weak type to strong type estimates. *J. of London Math. Soc.* (2), **70(3)** (2004), pp. 750–762.

Abstract: Let T be a sublinear operator such that $(T_{\chi_E})^*(t) \leq h(t, |E|)$ for some positive function $h(t, s)$ and every measurable set E . Then it is shown that under some conditions on the operator T , this restricted weak type estimate can be extended to the set of all functions $f \in L^1$ such that $\|f\|_\infty \leq 1$, in the sense that $(Tf)^*(t) \leq h(t, \|f\|_1)$. This inequality allows strong type estimates for T to be obtained on several classes of spaces, such as logarithmic spaces and Lorentz spaces. A similar problem for operators T acting on radial functions is also studied.

Referència: Martín, J., Milman, M. Extrapolation methods and Rubio de Francia's extrapolation theorem. *Adv. Math.*, **201(1)** (2006), pp. 209–262.

Abstract: We develop a general framework to study extrapolation of inequalities.

Referència: Cerdà, J. A note on commutator estimates for interpolation methods. *Math. Nachr.*, **280(9–10)** (2007), pp. 1014–1021.

Abstract: The aim of this note is to show how all the commutator estimates of two recent papers, by M. Cwikel, N. Kalton, M. Milman, and R. Rochberg and by N. Krugljak and M. Milman, can be considered as special cases of the method of couples of interpolators introduced by M. J. Carro, J. Cerdà and J. Soria, and also to show how the distance between orbits and the Benson norm considered by Krugljak and Milman can be extended, respectively, as a distance between the interpolators that appear in the general construction and as a constant that is finite when the interpolators satisfy the necessary cancellation property.