

# SHARP FOURIER EXTENSION INEQUALITIES ON THE HYPERBOLOID

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We study the problem of existence of extremizers for  $L^2$  to  $L^p$  adjoint Fourier restriction inequalities on hyperboloids. We explain some concentration-compactness mechanisms and the connections of these inequalities with Strichartz estimates for the Klein-Gordon equation.

*Joint work with Emanuel Carneiro (IMPA) and Diogo Oliveira e Silva (University of Bonn).*