

# How I met Michael

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This talk is intended to give an overview of a selection of Michael's results which directly inspired my research, as well as to present the outcomes by my collaborators and me, resulting from this influence.

In this regard, first I will survey the contributions by Michael concerning

- pointwise sparse domination of Calderón–Zygmund operators;
- sparse bounds for spherical maximal functions;
- time-frequency analysis approach to Rubio de Francia's Littlewood–Paley inequality;
- maximal theorems for directional Hilbert transform.

These contributions have delivered key ideas that, in particular, allowed my collaborators and me to develop further research which I will briefly describe. Time permitting, I will specially report most recent results on maximal singular integrals along hyperplanes from joint work with O. Bakas, F. Di Plinio, and I. Parissis.