**FIELDS**

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*Sharp weighted end-point estimates for Calderón-Zygmund Singular*
*Integral Operators*

In this talk we will present recent results about a sharp weighted weak type $(1,1)$ estimate for any Calderón-Zygmund singular integral operator assuming that the weight satisfy the $A_1$ condition. This result is related to a problem of Muckenhoupt-Wheeden that we will discuss. We will show that the endpoint result follows by proving first a corresponding sharp weighted $L^p$ estimate both sharp on $p$ and the $A_1$ constant of the weight. We will end by showing the connection of this result with the $A_2$ conjecture for Singular Integrals Operators.

This is joint work with Andrei Lerner and Sheldy Ombrosi.