Recent development in bilinear rough singular integrals

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In this talk we will study the $L^{p_1} \times L^{p_2} \to L^p$ boundedness for bilinear rough singular integral operators $\mathcal{L}_\Omega$ associated with $\Omega \in L(\log L)^\alpha(\mathbb{S}^{2n-1})$ with mean value zero. We will first review classical linear singular integrals and then study how the results have been extended and developed in the bilinear setting, presenting the most recent results. If time permits, general multilinear problems will be also discussed.