Quantitative weak mixing for IETs

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Abstract: We will start by introducing interval exchange transformations and mention some of their ergodic theoretical features. Then, we will state our main results concerning the speed of the decay of Cesaro average of correlations of sufficiently regular functions. The rates of decay distinguish the case of IETs obtained by returns of translation flows to transverse sections on Tori and those of higher genus surfaces. We will then discuss some ideas of the proofs. This is based on joint work with Giovanni Forni and Artur Avila.