

**Multilinear singular and oscillatory integrals and
applications**

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We give an overview of some recent results in the area of multilinear singular and oscillatory integrals. We discuss their connection with certain questions about point configurations in subsets of the Euclidean space and convergence of some ergodic averages. The talk is based on joint works with Michael Christ, Vjekoslav Kovač, and Joris Roos.