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Hong-Wei Zhang* (hong-wei.zhang@univ-orleans.fr), Institut Denis Poisson, 45067 Orléans cedex 2, France. *Wave equations on noncompact symmetric spaces.*

In this talk, we discuss sharp pointwise kernel estimates and dispersive properties for the wave equation on noncompact symmetric spaces of general rank. This is achieved by combining the stationary phase method and the Hadamard parametrix, and in particular, by introducing a subtle spectral decomposition, which allows us to overcome a well-known difficulty in higher rank analysis, namely the fact that the Plancherel density is not a differential symbol in general. As consequences, we deduce the Strichartz inequality for a large family of admissible pairs and prove global well-posedness results for the corresponding semilinear equation with low regularity data as on hyperbolic spaces. (Received November 08, 2020)