

Representation formulae for the higher-order Steklov and L^{2m} -Friedrichs inequalities

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In this talk, we obtain remainder term representation formulae for the higher-order Steklov inequality for vector fields which imply short and direct proofs of the sharp (classical) Steklov inequalities. The obtained results directly imply sharp Steklov type inequalities for some vector fields satisfying Hörmander's condition, for example. We also give representation formulae for the L^{2m} -Friedrichs inequalities for vector fields.