## THE FEYNMAN PROPAGATOR AND ITS POSITIVITY PROPERTIES

ANDRÁS VASY

ABSTRACT. In this talk, partially on joint work with Jesse Gell-Redman, Nick Haber and Michal Wrochna, I will explain the properties of the Feynman propagator, i.e. the inverse of the wave operator on 'Feynman function spaces', in various settings. I will also explain its positivity properties, and the connection to spectral and scattering theory in Riemannian settings, as well as to the classical parametrix construction of Duistermaat and Hörmander.

DEPARTMENT OF MATHEMATICS, STANFORD UNIVERSITY