Karlsruhe Institute of Technology

Collaborative Research Centre 1173
Summer school 2016

Kaiserstr. 12
76131 Karlsruhe, Germany

Phone: +49 721 608-47634
Fax: +49 721 608-43197
Email: office@waves.kit.edu
Web: www.waves.kit.edu

Date: August 10, 2016

Zertifikat seit 2010
audit familiengerechte hochschule

Fourier Restriction Theorems and Applications

Stein's influential ideas and conjectures concerning the restriction of the Fourier Transform to subsets of curved submanifolds and their connection with dispersive estimates will be reviewed. A new bilinear scalable extension estimate will be discussed, which generalizes bilinear estimates of Bourgain and Tao, among others, to critical function spaces. As an application, recent global well-posedness and scattering results for resonant and non-resonant Dirac-Klein-Gordon systems with small initial data in scale-invariant spaces will be presented.