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Kamran Sadiq, Altenbergerstrasse 69, Linz, Austria, and **Alexandru Tamasan***
(tamasan@math.ucf.edu), 4000 Central Florida Blvd., Orlando, FL 32816. *Range Characterization
of the attenuated X-ray transform of planar tensors.*

This talk concerns the characterization of the range of (non-attenuated and) Attenuated X-ray transform of symmetric tensors in the plane. We start with the forward model of the Radiative transport in attenuating media, and define the X-ray transform as traces of solutions of the transport model. We use the theory of A -analytic maps of A. Bukhgeim. The characterization is in terms of a Hilbert transform for A -analytic maps. (Received January 14, 2015)