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# Fingerprint matrix beamforming

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## Abstract

We show that the scattering invariant modes recently introduced for the transmission of monochromatic light can be extended to the case of the reflection of acoustic waves in the broadband regime. We explain how to take advantage of the operator describing these states for imaging purposes. In particular, we study the detection of a target embedded in a strongly scattering medium, and the local quantification of scattering anisotropy in a fibrous medium such as muscle tissues.

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