

1077-G5-1922 **Thomas Höft*** (thomas.hoft@tufts.edu). *Optimization in Fourier imaging for laser remote sensing.*

We describe an imaging modality, digital holography, used in industry for laser-based long-range remote sensing. The Fourier transform is central to computational image formation. An optimization problem arises when compensating for the blur caused by imaging through a turbulent atmosphere. Results from computer simulations and field-collected data will be presented. (Received September 21, 2011)