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Linh Viet Nguyen* (languyen@uidaho.edu), Department of Mathematics, University of Idaho,
875 Perimeter Drive MS 1103, Moscow, ID 83844-1103. *On A Reconstruction Formula for
Spherical Radon Transform : A Microlocal Analytic Point of View.*

Let \mathcal{R} be the restriction of the spherical Radon transform to the set of spheres centered on a hypersurface \mathcal{S} . In this talk, we discuss the construction of a function f from $\mathcal{R}(f)$ by a closed-form formula. We approach the problem by studying an oscillatory integral, which depends on the observation surface \mathcal{S} as a parameter. We then derive various microlocal analytic properties of the associated closed-form reconstruction formula. (Received January 23, 2014)