

Ville Turunen: *Pseudodifferential calculus on the 2-sphere*; Helsinki University of Technology Institute of Mathematics Research Reports A462 (2003).

Abstract: *We show how pseudodifferential equations on the unit sphere of the 3-dimensional Euclidean space can be studied using the spherical harmonic Fourier series on the symmetry group of the sphere.*

AMS subject classifications: 58J40, 33C55, 22E30, 47G30, 35S05.

Keywords: Pseudodifferential operators, symbol calculus, asymptotic expansions, spherical harmonics, rotation group.

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