1041-52-65 Paul Goodey and Vladyslav Yaskin* (vladyaskin@math.ualberta.ca), Department of Math. and Stat. Sciences, University of Alberta, Edmonton, Alberta T6G 2G1, Canada, and Maryna Yaskina. Christoffel's problem and the Fourier transform.

The Christoffel problem asks for necessary and sufficient conditions for a given Borel measure on the sphere to be the first surface area measure of a convex body. The problem was solved in the late 1960's by Firey and Berg. We use Fourier transform techniques to present a new perspective on Berg's solution of Christoffel's problem. (Received August 02, 2008)