1014-52-1386 Paul Goodey and Wolfgang Weil\* (weil@math.uni-karlsruhe.de), Mathematisches Institut II, Universität Karlsruhe, 76128 Karlsruhe, Germany. Determination of convex bodies by directed projection functions.

We use a tensor-type integral formula for intrinsic volumes of convex bodies K in d-dimensional Euclidean space to define a further variant of directed projection functions and show that these determine the body K uniquely. We then study averages of directed projection functions and discuss the connections between the resulting integral operators and previously considered spherical transforms. (Received September 28, 2005)