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**Dmitry Ryabogin** and **Vladyslav Yaskin\*** (yaskin@ualberta.ca), Department of Math & Stat Sciences, University of Alberta, Edmonton, Alberta T6G 2G1, Canada. *Detecting symmetry in star bodies.*

We use Fourier transform techniques to prove a result on detecting symmetry in convex and star bodies with the help of conical sections. Our methods also allow us to give a new proof of the well-known theorem of Makai, Martini and Ódor about maximal hyperplane sections passing through the same point. (Received August 30, 2012)