1135-30-1338 **Koushik Ramachandran*** (koushik.ramachandran@okstate.edu). *Convexity of level curves of Martin functions and associated Maximum principles.*

Let Ω be an unbounded domain in $\mathbb{R} \times \mathbb{R}^d$. A positive harmonic function u in Ω which vanishes on the boundary, $\partial\Omega$, of Ω is called a Martin function on Ω. In this talk, we will prove that when Ω is convex, the super-level sets of a Martin function are also convex. As a consequence we obtain that if in addition Ω is also rotationally symmetric, then the maximum of any Martin function along a slice $\Omega \cap (\{x\} \times \mathbb{R}^d)$ is attained at $(x, 0)$. This talk is based on joint work with Gallagher, A.-K., and Lebl, J. (Received September 21, 2017)