

*Speaker:* **Kalman, Tamas**

*Title:* *Fibrations with Legendrian Fibers*

*Authors:* Tamas Kalman (Tamás Kálmán)

*Affiliations:* University of California at Berkeley

*Abstract:* I will consider contact 3-manifolds  $(M, \xi)$  that are also total spaces of fibrations with a two-dimensional base  $F$ , so that the fibers are Legendrian with respect to  $\xi$ . A Legendrian knot  $K$  in  $M$  then has a front projection to  $F$ . I will show how, for a fixed base  $F$  with standard constant curvature metric,  $M = ST^*F$  (the bundle of cooriented contact elements to  $F$ ) and  $K$ , one can vary the fibration so that the resulting family of projections is a wave propagation. I will also prove that if the fiber is a circle, then  $M$  is a covering space of  $PT^*F$ , the bundle of contact elements to  $F$ .