1139-54-685   **NIckolas A Castro*** (`ncastro@math.ucdavis.edu`), Department of Mathematics, UC Davis, Davis, CA 95616. *Complicated Monodromies and Relative Trisections.* Preliminary report.

When a smooth, compact, connected, oriented 4-manifold is trisected relative to a non-empty boundary, the bounding 3-manifold inherits the structure of an open book decomposition. In joint work with Gay and Pinzón, an explicit algorithm was given to recover the (abstract) open book from a relative trisection diagram. In this talk, we will use this algorithm to understand the complexity of the monodromy of an induced open book decomposition with connected binding (i.e., a fibered knot). This gives rise to interesting questions regarding relatively trisected cobordisms and their induced open books. (Received February 20, 2018)