Abstract: In this talk we study the existence question of disk-like global surfaces of section of tight Reeb flows on the 3-sphere and on lens spaces, and describe some applications. For instance, we find new global sections on strictly convex 3-dimensional energy levels in R^4, give examples of non-dynamically convex geodesic flows of non-reversible Finsler metrics on the 2-sphere having disk-like global sections, and explain how comparison theorems in Finsler geometry can be replaced by pseudo-holomorphic curve techniques. This is joint work with Pedro A. S. Salomão.