1014-51-1708   **Rosa Sena-Dias*** (`rdurao@math.harvard.edu`), Harvard University, Mathematics department, 1 Oxford St, Cambridge, MA 02138. *Estimated transversality.*

In his work on symplectic Lefschetz pencils, Donaldson introduced the notion of estimated transversality for a sequence of sections of a bundle. Together with asymptotic holomorphicity, it is the key ingredient allowing the construction of symplectic submanifols. Despite its importance in the area, estimated transversality has remained a mysterious property. In this talk our aim is to shed some light into this notion by studying it in the simplest possible case namely that of S^2. We state some new results about high degree rational maps on the 2-sphere that can be seen as consequences of Donaldson's existence theorem for pencils, and explain how one might go about answering a question of Donalson: what is the best estimate for transvesality that can be obtained? We also show how the methods applied to S^2 can be further generalized.