1117-53-435 Christian Duval* (duval@cpt.univ-mrs.fr). A new integrable system on the sphere and conformally equivariant quantization.

I will introduce a new Liouville-integrable system, namely the "dual Jacobi-Moser system", associated with the geodesic flow of the n-sphere, endowed with a conformally flat metric which is projectively equivalent to that of the generic Jacobi n-ellipsoid. I will go on proving that quantum integrability of both dual Jacobi-Moser and Neumann-Uhlenbeck systems is ensured by means of conformally equivariant quantization. This is joint work with G. Valent. (Received January 18, 2016)