1015-53-175 **Dimiter Vassilev*** (dvassilev@math.ucr.edu), Department of Mathematics, University of California, Riverside, Riverside, CA 92521. *Towards the Obata theorem on the quaternionic sphere*. Preliminary report.

We consider several Obata type theorems and present some progress in the quaternionic case considered together with with Stefan Ivanov and Ivan Minchev, Uiversity of Sofia, Bulgaria. (Received February 03, 2006)