The latest results in mixing and indirect CP violation in charm decays at LHCb are presented. The mixing in charm is observed in D->K3pi decays for a first time, and the non-mixing hypothesis is rejected with a significance of 8.2 standard deviations. The analysis of these decays at LHCb provides important constraints for the strong phase and the coherence factor needed as an external input in the determination of the CKM angle gamma.
The decay mode D->Kshh is the golden mode for measuring the charm mixing parameters. The results based on 1 fb-1 collected during 2011 are shown.