Spin determination of Lageos-1 from kHz laser observations

D. Kucharski (1), G. Kirchner (2)

(1) Space Research Centre, Polish Academy of Sciences, Poland, kucharski@cbk.poznan.pl

(2) Austrian Academy of Sciences, Institute for Space Research, Austria, kirchner@flubpc04.tu-graz.ac.at

The first SLR system operating with 2 kHz laser works at Graz Station. Very high density data allows to see retro tracks. Analysis of this phenomena gives information about parameters of very slow rotation (\sim 0.0003 Hz) objects like LAGEOS-1. Thus kHz laser technique produces new kind of data about LAGEOS -1 orbital movement. Not just the range but also rotation parameters. How to recognize spin tracks of LA-GEOS -1 satellite will be shown.