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| Title of the project | Nonlinear NMR in superfluid 3He in aerogel  CNRS 04 |
| User group leader | Golov, Andrei, professor |
| Users | Zmeev, Dmitri, post-doctoral research associate |
| Home Institute | Schuster Laboratory, University of Manchester, UK |
| Description of the work | The objective of this project is to investigate the properties of the non-linear NMR modes in superfluid 3He in aerogel under different conditions. In NMR experi­ments performed on the DN1 instrument of TA2, we investigated superfluid 3He in radially compressed aerogel samples. We used for this purpose high sensitivity, very low power, continuous-wave NMR instrumentation devel­oped at the TA2 facility.  New signals were observed close to Tc. Contrary to all know signals in superfluid 3He, these display a negative frequency shift. These observations are presently under theoretical investigation. |
| Amount of access given | 33 days |