1. Name of the institution and contact person:

Ioffe Phisico-Technical Institute of Russian Academy of Sciences
Address: 26 Polytechnicheslaya str., St. Petersburg 194021, Russia
Contact person: Elena Verbitskaya
e-mail: elena.verrbitskaya@pop.ioffe.rssi.ru

2. Group members, time devoted to this activity:

Elena Verbitskaya – 60%
Vladimir Eremin – 50%
Igor Ilyashenko – 40%
Alexandr Ivanov – 20%
Nikita Strokan – 20%

3. Current activities of the group:

- Development of radiation hard Si detectors operated at cryogenic temperatures;
- Development of silicon detectors based on electric field manipulation by current injection (CID);
- Development of detectors based on semi-insulating GaAs;
- Characterization of semiconductors enriched with defects with deep energy levels (irradiated Si, semi-insulating GaAs, SiC);
- Investigations related to device physics and modeling of detector operation;
- Development of silicon photodiode arrays for medical application.

4. Fields of interest within this collaboration:

- Device modeling for radiation induced defect characterization and investigation of detector radiation degradation;
- Trapping related effects at different temperatures;
- Characterization of segmented detectors (simulation and study of charge collection in irradiated detectors).

5. Available resources:

- Setups for detector characterization (I-V, C-V, I-T);
- Capacitance Deep Level Transient Spectroscopy;
- Transient current technique at various temperatures;
- TCT scanning setup;
- Irradiation facilities - medium energy protons.