

**New Programming Technologies for Beam Diagnostics, S.A. KRYUKOV**, INR, Russian Academy of Sciences - The MOON Lab, new software for solving various problems of beam diagnostics has been developed at the Moscow Meson Factory Linac. ("MOON" stands for "Multitasking Object-Oriented Network".) This program tool takes few advantages when compared with the LabView<sup>®</sup>, its closest prototype. Several novelties of the programming technology are introduced: multitasking sharing of the apparatus via the driver-reside semaphores, asynchronous process control via the user interface, network-transparent control and more. All that extremely simplifies developing and debugging applications for beam diagnostics, data processing and presentation through a network. The new program technology has been tested on PC applications operating with beam loss monitors, neutron counters and beam current transformers.