Abstract Submitted
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Application of experimental methods of nuclear physics for studies of fundamental quantum physics[1] JOHANN MARTON, Austrian Academy of Sciences, VIP2 COLLABORATION — In nuclear physics arrays of silicon drift detectors (SDDs) are extremely successful detectors for the spectroscopy of X-ray transitions in kaonic atoms. New experiments using X-ray spectroscopy at DAFNE/LNF-INFN in Italy and J-PARC in Japan for the first strong interaction studies of the exotic atom, kaonic deuterium, are in preparation. The development of SDD X-ray detectors is also essential part of present experiments in the foundation of quantum physics, like testing the spin statistics for electrons. The experiment VIP2 at the underground laboratory Gran Sasso is using the same kind of solid-state detectors for precision X-ray detection. In the talk an overview of application of SDDs in nuclear physics at DAFNE and J-PARC employing kaonic atoms will be given.

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