

## **Development of Focusing Aerogel RICH detectors in Novosibirsk**

Latest steps in the development of the Focusing Aerogel RICH (FARICH) in Novosibirsk are presented. FARICH is studied using a Geant4 simulation code. Our group developed the technique of multilayer aerogel production. Several multilayer aerogel samples were produced. A project of the Forward RICH for the SuperB experiment is presented. It features a dual aerogel-water radiator and Photonis MCP PMTs. The detector would be able to perform  $\pi/K$  separation at 3 sigma level from 0.2 to 7 GeV/c,  $\mu/\pi$  separation – from 0.13 to 1.4 GeV/c. A prototype of the FARICH is being built at BINP. It will be tested with a dedicated electron beam line. At the first stage MRS APDs produced by CPTA (Moscow) are to be used as photon detectors. Noise rate, gain and photon detection efficiency were measured for several APDs.

An aerogel RICH for the PANDA detector is proposed. It is shown that the detector will separate pions and kaons up to 10 GeV/c momentum. Also  $\mu/\pi$  separation up to 2 GeV/c momentum will be possible.

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