

**Photon Beam Position Monitors Suitable for a Local Feedback System at ELETTRA, A. GALIMBERTI, A. ABRAMI, Q.H. CHEN, D. GIURESSI, L. OLIVI, R. SERGO, A. SAVOIA, Sincrotrone Trieste** - A high flux Photon Beam Position Monitor (PBPM) has been designed, realized and installed at ELETTRA for increasing the beam stability with local-bump-orbit feedbacks, for beam diagnostic and for beam alignment. An electronic equipment is been designed and built for the calculation of the photon beam centre positions and the beam angles both on the vertical and horizontal planes. A description of the PBPMs system and its performances is presented. Measurements and test runs revealed a high precision and reliability of the PBPM and its electronics. A submicron sensitivity in the beam centre positions and a submicroradiant sensitivity for the beam angles detection are achieved. At present, a PBPM system is installed in each front-end of beamlines from undulator and wiggler at Elettra. Starting from the results presented, further applications of the PBPM system for third generation Synchrotron Radiation machines are discussed in the paper.