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An Electronic Phosphor for Low-Intensity Beam Diagnostics¹ W. T. MILNER, D. SHAPIRA, T. A. LEWIS, Physics Division, Oak Ridge National Laboratory — Data from a position sensitive timing detector that is based on the detection of beam-induced electron emission from a thin foil is continuously sampled. The sampling technique provides a display of the beam profile. For beam intensities in excess of 500 particles/sec, a response time of 0.1 sec provides a near-continuous live display that responds well to operating parameters such as quadrupole and steerer settings. The detector operates in single counting mode and can “sense” even the smallest amount of beam hitting it, thus providing great help for tuning low-intensity beams.

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Prefer Oral Session
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