

Abstract Submitted
for the DPP07 Meeting of
The American Physical Society

Sorting Category: 10.0.0 (E)

**Soft X-ray Tomography at
DIII-D**¹ H. RINDERKNECHT, Princeton U., R.K. FISHER, General
Atomics, E.M. HOLLMANN, UCSD, M.J. LANCTOT, Columbia U.,
F. VOLPE, ORAU — Two new 32 channel SXR pinhole cameras have
been recently installed in the DIII-D tokamak. They are sensitive to
photons in the 2-20 keV range, but an interchangeable set of diamond
filters with five settings allows selection of the range of energies of inter-
est. New tomographic inverters were developed and validated against
analytic models and magnetically reconstructed EFIT equilibria. To-
mographic inversion techniques suitable for use with the new diagnostic
geometry and preliminary inversions of new SXR data will be presented,
along with re-analysis of earlier measurements of disruption-generated
fast electrons and equilibria. Thanks to a temporal resolution of a few
microseconds, progress has also been made in the tomographic recon-
struction of rapidly moving, relatively weak emitters such as rotating
islands.

¹Supported by the US DOE under a National Undergraduate Fusion
Fellowship Program, DE-FC02-04ER54698, DE-FG02-04ER54758, and
DE-FG02-89ER53297.

- Prefer Oral Session
 Prefer Poster Session

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Date submitted: 24 Jul 2007

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