

Vertex Detector EMI Issues

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A Short List of Things to Think About

- EMI IS an issue:
 - We have previous experience of beam-related pickup
 - SLD vertex detector
- RF sources in the ILC interaction region
 - Collimator wakefields?
 - Can EM radiation leak out?
 - Beampipes do have holes!
 - Bellows, pumps, laserwire ports etc.
 - Characteristics of EM environment

Vertex Detector Sensors

- What about the susceptibility of ICs?
 - Vertex detector sensors themselves
 - Could chips behave like waveguides for escaping RF?
 - Different response of various technologies
 - Disturbance to stored signals in pixels
- Shielding of vertex detector
 - Faraday cages?
- Chris Damerell's talk in the VXD session and EMI session next week.