**Goal: Find response of the ILC sub-detectors to background radiation**

Radiation Sources:

- Machine-related backgrounds
- Radiation from collision point

Tools involved:

- STRUCT-MARS - beam delivery system simulation
- GEANT4 - simulation of detector responce
- Slic, Xerces C++, LCIO - description of the detector geometry
- Guinepig - event generator fot beam-beam interactions
- ROOT - scoring system and data analysis

## PLANS

- Tool installation on FNAL site ( Sun-g++ and Linux platforms)
- Geant4 application development and assembly
  - G4 interface to the source generated by STRUCT-MARS for background radiation
  - Development of c++ modules for estimators
- Obtain first results for particle flow coming to z = -5 m upstream IP
- Development application which allows duplex runtime data exchange between beam delivery simulation program (MARS) and detector simulation program (GEANT4)
- Re-run and optimize machne-detector interface (ROOT format)

Present stage : Software installation

Status: Almost done

**Problems encountered:**

- Geant4 does not support Sun-g++ platform (passed)
- Slic installation procedure does not work under SunOS (under consideration).