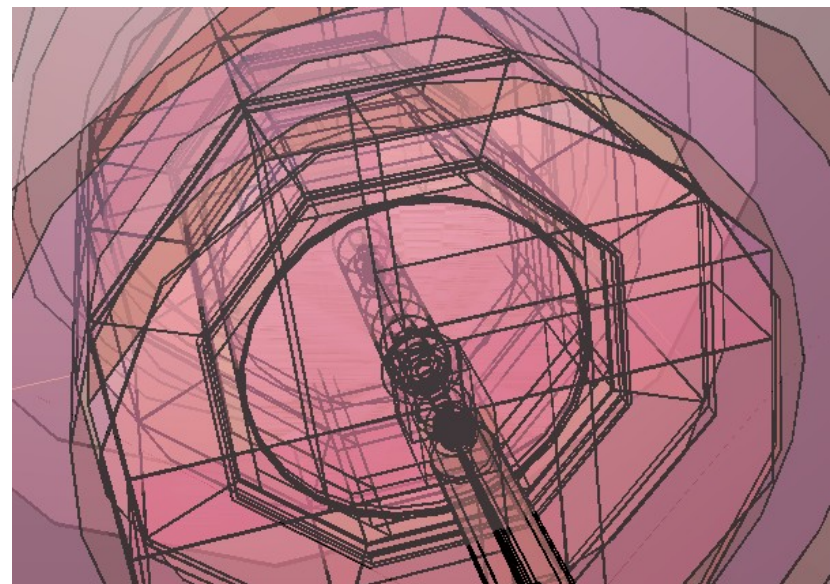


# Test Beams for tracking/vertexing R&D

Some rather obvious remarks

ILC test beam workshop

Preparatory meeting 26 May 2009



Marcel Vos (IFIC - U. Valencia/CSIC)



# Specific requirements

Specific requirements from VXD and silicon tracker collaborations:

Excellent spatial resolution of devices under test.

- Precise telescopes (EUDET, proprietary, or both)
- High-energy beams (CERN NA, rather than DESY)

Magnetic field

- Large-bore high-field magnet available in JRA1?

Large number of collaborations:

- Lots of beam time

# The CERN SPS North Area

Test beam periods for R&D on silicon tracking & vertexing during summer 2009 in the CERN SPS North Area (includes LHC upgrade work)

<i>May 18 - June 3:</i>	<i>3DSi</i>
<i>May 25 - May 31:</i>	<i>MonoPix</i>
<i>June 7 - June 20:</i>	<i>SiTRD</i>
<i>June 18 - June 25:</i>	<i>RD42</i>
<i>June 20 - June 26:</i>	<i>ATLAS - gossip</i>
<i>June 25 - July 1st:</i>	<i>ATLAS diamond</i>
<i>June 29 - July 13:</i>	<i>CMS Si-Upgrade</i>
<i>July 23 - 5 August:</i>	<i>EUDET</i>
<i>August 5 - August 12:</i>	<i>DEPFET</i>
<i>August 12 - August 19:</i>	<i>LCFI</i>
<i>August 19 - August 30:</i>	<i>SiLC</i>
<i>September 7 - Sep 13:</i>	<i>ATLAS diamond</i>
<i>September 14 - :</i>	<i>MediPix</i>
<i>September 24 - Oct 1st:</i>	<i>RD42</i>
<i>October 22 - Nov. 4:</i>	<i>ATLAS 3DSi</i>
<i>November 4 - Nov. 12:</i>	<i>MonoPix</i>

# Combined TB

Useful combinations can be (and some indeed has been) made:

- Silicon-TPC (DESY, EUDET MEMO 2007-28)  
*SiLC/HEPHY Viena*
- Silicon-alignment system  
*SiLC/IFCA*
- Full tracker slice (in magnetic field)
- Tracker-Calorimeter (Particle Flow TB)

Requires common DAQ (at some level). EUDET?

Requires significant coordination...