

Session I Summary

Robert Macek, 4/18/02

Schedule

Summary of Key Observations

EC Observation	KEKB	PEP II	SPS	PSR
Primary electrons	PE	PE	Vac/Losses ?	Losses/Vac/ foil
Pressure rise	yes	yes	yes	yes
Instability/ Emittance Blowup	yes	yes	yes	yes
Electron detection/ energy analysis	yes	no	yes	yes
Beam Scrubbing effect	no	?	yes	yes
Installed “cures”	Solenoids	Solenoids + TiN in arcs	?	Added Landau damping, inductive inserts
Heat Load Measurements	---	---	yes	----
In situ SEY	----	----	yes	----

Main EC Concerns for New Machines

- **SNS**

- ◆ e-p instability
- ◆ possible run away of vacuum pressure

- **LHC**

- ◆ heat load on cryogenic wall and
- ◆ perhaps instability at injection

- **NLC**

- ◆ instabilities in damping ring

Highlights from individual talks using speakers' transparencies