



Workshop summary

- Program (base + collaborators)
- Written proposals
- Prioritization
- Beam ex organization, scheduling
- Issues (offline model)
- From now to beam



Beam Ex Program 2003

AC dipole

Beam-beam

Chromaticity

Collimation

Flat-top studies

Instabilities

Pressure rise, e-cloud

Stochastic cooling

Transition studies (α -1)

M. Bai

W. Fischer

S. Tepikian

A. Drees

V. Ptitsyn

M. Blaskiewicz

S.Y.Zhang

M. Blaskiewicz

C. Montag

Discussed at the workshop Thursday afternoon



Proposals from collaborators

Collaborative studies in 2001 (examples)

- ❑ IR measurements and corrections (CERN, FNAL)
- ❑ Resonance driving terms, coupling resonance (CERN)
- ❑ Beam-beam (FNAL, LBL)

Proposals for 2003 from collaborators

- ❑ RF phase modulation, chromaticity (O.Bruning) → Rhodri talk
- ❑ Measure synchrotron radiation suppression (H.Burkhardt)
- ❑ Head-tail chromaticity measurement (R.Jones) → Rhodri talk
- ❑ IR correction – cont'd (J-P. Koutchouk) → operations
- ❑ Coupling feedback (J-P. Koutchouk)
- ❑ Resonance driving terms – cont'd (F. Schmidt) → Frank talk
- ❑ Quench limit test with beam (R. Schmidt)



Beam Ex written proposals

Written proposals for experiments (←memos)

- ❑ Experiment **goal** and feasibility
- ❑ **Benefits** for the machine (operations, performance, upgrades)
- ❑ Measurement **description** (specify instrumentation, applications, MCR resources, time needed etc.)
- ❑ Plan for data **analysis**
- ❑ **Output**

Selection and prioritization

Example CERN → formal committee

RHIC 2003 → use workshop to start prioritize program
collect written proposals by **mid december**, review
use weekly beam-ex meetings to update



Prioritization of experiments

Run 2003

- ❑ Discussion (workshop & next 2 months)
- ❑ Overall (internal review) of written proposal, including proposals from collaborators
- ❑ Circulation of proposals among interested parties
- ❑ Week-to-week update at weekly beam experiment meetings
- ❑ 2004 on

Run 2004 on

Consider more formal review process (internal & external reviewers) if proposed experiments at RHIC:

- ❑ Become larger (time requests and \$ investments)
- ❑ Not in direct interest of RHIC and its upgrade program



Beam Ex 2003 - scheduling

Conclusions from RHIC Retreat 2002 (march):

Monday

Scheduling Meeting (decision)

scheduling physicist (1)

experiment liaisons (5)

run coordinator (1)

beam experiments (1)

Roser, Pile (+ Management if necessary)

Tuesday

Time Meeting (broadcast)

Weekly

Experiments Meeting

Weekly

Beam Experiments Meeting

Daily

9 o'clock meeting

during set-up and ramp-up only

to handle 'emergency' situations



Issues

- Offline model

Do not make it necessary for beam based corrections

Make it available ASAP



priorities

- ❑ Pressure rise / e-cloud (commissioning plan → dedicated studies)
- ❑ Fast and easy access to optics measurements (AC dipole)
- ❑ Luminosity lifetime (Vadim 5h/1h efficiency 0.8) → working point
- ❑ Chromati-sm-city
- ❑ Emittance, emittance, emittance
- ❑ Effective use of Schottky data → standard visualization on main RHIC console
- ❑ Collimation → secondary collimation studies
- ❑ Transition jump/diamond size
- ❑ Stochastic cooling
- ❑ Development of fast damper, instabilities
- ❑ Polarization – test of 250 GeV ?
- ❑ NOTE: Reserve 3 weeks of studies with pp for studies that need the beam conditions



From now to beam time

- ❑ Collect (and digest) workshop material → talks on the WEB
- ❑ Friday meetings: biweekly until beam study time, then weekly
- ❑ Collect experiment written proposal by december → prioritized program
- ❑ Do it!