ATLAS Commissioning and LHC turn-on

J. Huston
Michigan State University

ATLAS TileCal Planning Meeting Valencia
Why I’m not in Valencia

World Year of Physics 2005 at Michigan State University

What is happening at MSU?

Einstein Centennial Event: a celebration of the 100th anniversary of Einstein’s miracle year and the World Year of Physics (2005).

Date: March 10, 2005

Place: Michigan State University, Biomedical Physical Sciences Building
# MSU TileCal personnel

<table>
<thead>
<tr>
<th>Person</th>
<th>Position</th>
<th>%ATLAS (current)</th>
<th>%other (current)</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joey Huston</td>
<td>Professor</td>
<td>50%</td>
<td>50% (CDF)</td>
<td></td>
</tr>
<tr>
<td>Carl Bromberg</td>
<td>Professor</td>
<td>20%</td>
<td>80% (CDF)</td>
<td></td>
</tr>
<tr>
<td>Bob Miller</td>
<td>Research scientist</td>
<td>20%</td>
<td>20% (CDF)</td>
<td>Active retired</td>
</tr>
<tr>
<td>Ron Richards</td>
<td>Design tech</td>
<td>90%</td>
<td>10% (CDF)</td>
<td></td>
</tr>
<tr>
<td>Mike Nila</td>
<td>Mechanical tech</td>
<td>90%</td>
<td>10% (CDF)</td>
<td></td>
</tr>
<tr>
<td>Matthias Toennesmann</td>
<td>postdoc</td>
<td>10%</td>
<td>90% (CDF)</td>
<td></td>
</tr>
<tr>
<td>Gene Flanagan</td>
<td>Grad student +</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
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Current ATLAS projects

- **Construction**
  - gap scintillators
    - few more fiber assemblies
  - cryostat scintillators
    - assembly/testing
    - awaiting scintillator to arrive from Dubna in next 2 months
    - construction this summer
  - MBTS scintillators
    - assembly/testing
    - awaiting final decision on dimensions
    - scintillator to arrive from Dubna within next month
    - construction this summer

- **Commissioning**
  - module repair/misc work
  - light-tightening ITC modules
  - moisture barrier/drain for barrel/extended barrels
  - installation and testing of cryostat/MBTS scintillators (this fall)
  - installation of polyethylene moderator?
Cryostat scintillators

Mounting plate

Mounting holes

MOUNTING DETAIL

NOTES:
* Indicates Envelope Dimension
Dimensions assume 2 mm between Ctrs.

MICHIGAN STATE UNIVERSITY
HIGH ENERGY PHYSICS

DRAWN | R. Miller
DATE  | 9-21-01
REV   | E
PROJECT | ATLAS ITC Scintillator
MATERIAL |
TITLE  | MOUNTING
DWG. NO | HW-P-025-371
SCALE  | 1:5
MBTS scintillators

mounting scheme

segmentation

…currently working with prototype to understand output signal characteristics (with Kelby Anderson and Jim Pilcher)
Installation plans

- Currently Ron is scheduled to make 4 3-week trips to CERN this year
  - last one in Jan/Feb
  - next one in May
  - if funding allows, Ron may try to spend a longer period this fall at CERN

- During installation of cryostat/gap/MBTS scintillators for EBC and EBA, MSU will send:
  - Ron
  - Mike Nila
  - Bob Miller
  - Joey Huston
  - Carl Bromberg

So that at least 2 MSU people will be present at any time.
2006-2007

- Ron/Mike will continue to travel to CERN for installation work
- We are currently looking for a graduate student to work on ATLAS
  - move to CERN as soon as classes allow
  - …and possibly a 2nd student in 2007
- Matthias Toennesmann (or replacement) will spend 50% of his time on ATLAS in 2007, becoming 100% in 2008
- I plan on coming to CERN during summer of 2007/first turn-on of LHC
  - possibly sabbatical