

# CESR TA Machine Studies Task Overview

## I. Experiment Description

<b>Experimental Topic</b>	Electron Cloud Studies Setup	
<b>Classification*</b>	EC	
<b>Coordinator/ Experimenters</b>	Billing/Dugan	Billing, Dugan, Sonnad, Ramirez, Forster
<b>Primary Goals</b>	Test any modifications to measurement software	

<b>Description<sup>†</sup></b>	<b>Setup</b>	
	Software testing of <ol style="list-style-type: none"> <li>1. Swept frequency shaking (TUNE)</li> <li>2. Instability spectra (INST)</li> <li>3. Damping measurements (DAMP)</li> </ol> Some of this can be done before we have stored beams.	
<b>Special Needs/Requests</b>		
<b>Prerequisites<sup>‡</sup></b>	<b>Personnel</b>	<b>Description</b>
	Billing, Forster,	Establish stored beams (MREC)
<b>Time Requested<sup>§</sup></b>	<b>No. Shifts</b>	<b>Principal Tasks</b>

\* Machine Studies Classifications:

- EC - Electron Cloud
- LET - Optics Correction and Low Emittance Tuning
- xBSM - x-ray Beam Size Monitor
- INST - Instrumentation (BPM development, RFA development, other)
- MDEV - Machine Development (includes injection configuration, injection tuning, custom orbit setup, instrumentation preparation, etc.)
- MREC - Machine Startup (recovering conditions after down time)

<sup>†</sup> Attach additional pages for experimental description if needed

<sup>‡</sup> Indicate other machine work that is required in preparation for this machine studies experiment.

4-6 hours	Ramirez, Billing	Test measurement software for 1, 2, 3 above

## II. Machine Studies Assignments

Reserved for Project Management Team Use		
<b>Topic ID</b>		
<b>Priority</b> <sup>**</sup>		
<b>Shift Assignments</b>	<b>Date</b>	<b>Shift</b>

### Notes:

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<sup>§</sup> Indicate the principal shift topics and estimated number of shifts required

<sup>\*\*</sup> Priority Scale:

1. Critical – results are necessary for preparation for subsequent down/run periods
2. Very high – results are strongly desired for achieving program milestones or in preparation for subsequent down/run periods
3. High – results are of immediate interest but not require
4. Moderate – results should be pursued at the first convenient opportunity
5. Low – results are not presently a high priority for either project milestones or planning