

<b>SPIRE/PACS</b> (CEA-SBT)	<b>Monthly Report – August 2003</b>	<b>Date:</b> September 1 <sup>st</sup> , 2003
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**Work Package: Cooler**

**SPIRE-REP-SBT-001778**

<b>1. Subsystem Progress Since Project Inception</b>		
Detailed design of the coolers (CQM, STM, PFM & FS) done. Manufacturing of 2 CQM + 2 STM done. Manufacturing of new large test cryostat done (“standard” test cryostat available). Product Assurance plan implemented. STM units delivered. CQM units : SPIRE delivered – PACS : final thermal tests.		
<b>2. Subsystem Progress This Month</b>		
<p>- CQM SPIRE delivered to RAL August 19<sup>th</sup>. Overall mechanical and thermal performance within required specifications, but thermal performance in terms of hold time below predicted values. 8 <math>\mu</math>W extra parasitics spotted. Attributed to heat switch for now (TBC)..</p> <p>- CQM PACS : thermal tests carried out prior to vibration tests did not show any significant non-expected parasitics load. Last thermal tests (HCR#3) indicate now extra parasitic load (8 to 11) – currently under investigation. During last cooldown, loss of thermometer on pump heat switch : PACS cooler will be open at next warm up for investigation and possibly fixing (re-soldering of wires) – Note : technical staff to attend ESA soldering qualification program middle of September. CQM PACS expected to be delivered week 39.</p> <p>- Kevlar characterisation campaign : On going (new set of tests with dummy suspension system) – New tensioning procedure to be produce.</p>		
<b>3. Problem Areas</b>		<b>Remedial Action</b>
Peculiar behaviour of Kevlar / additional thermal load on cooler		Under investigation
<b>4. Engineering Activities</b>		
<b>5. Design Changes</b>		
<b>6. PA/QA Activities</b>		
General QA management.		
<b>7. Subsystem Management Issues</b>		
None		
<b>8. Actions Requiring Immediate Attention</b>		
SBT documents approval by SPIRE and PACS projects		
<b>9. Status of Previous Actions</b>		
None		
<b>10. Activities Yet to be Achieved</b>		
<b>11. Milestones</b>		<b>Status</b>
Winter 00-01	Coolers Detailed Design	Completed
May 17 <sup>th</sup> 2001	Coolers DDR (PACS & SPIRE)	Completed
June 26 <sup>th</sup> 2001	Subcontractor selection for machining	Completed
October 2001	Parts Delivery	Completed
Spring 2003	CQM Coolers assembling	Completed
Nov/Dec 2001	STM Coolers Assembling and Vtest	Completed
Nov. 2002	STM Coolers delivery	Completed
Spring 2003	CQM Coolers Qualification	Completed for SPIRE
Autumn 2003	CQM Coolers Delivery	Completed for SPIRE
<b>12. Schedule Changes</b>		