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# Review of the CLIC Physics/Detector CDR

Stefan Söldner-Rembold

Manchester, 18-20 October 2011

# What do we review ?

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CLIC CONCEPTUAL DESIGN REPORT

VOL. 2:  
PHYSICS AND DETECTORS AT CLIC

# Review Committee

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Stefan Soldner-Rembold, Manchester (chair)

Philip Bambade, LAL

Giovanni Batignani, INFN Pisa

Brigitte Bloch-Devaux, Turin

Daniel Elvira, Fermilab

Philippe Farthouat, CERN

Paul Grannis, SUNY Stony Brook

Marian Ivanov, GSI Darmstadt

Richard Nickerson, Oxford

Arnulf Quadt, Göttingen

Rob Roser, Fermilab

Nobu Toge, KEK

Yifang Wang, IHEP

Pippa Wells, CERN

Hitoshi Yamamoto, Tohoku

# What is the charge ?

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The main purpose of the CLIC physics/detector CDR is to present the physics potential for a CLIC multi-TeV  $e^+e^-$  collider and to demonstrate, at the conceptual level, that detector concepts and technologies can be proposed that will enable to measure the physics with adequate precision.

The review will address this question. It will determine whether the physics case that has been put forward is convincing given the current status of particle physics. It will also review the CLIC\_ILD and CLIC\_SiD detector concepts described in the CDR document, as well as the proposed detector technologies, including simulation. The review should also address the proposed methods for extracting physics in the presence of strong beam-induced background.

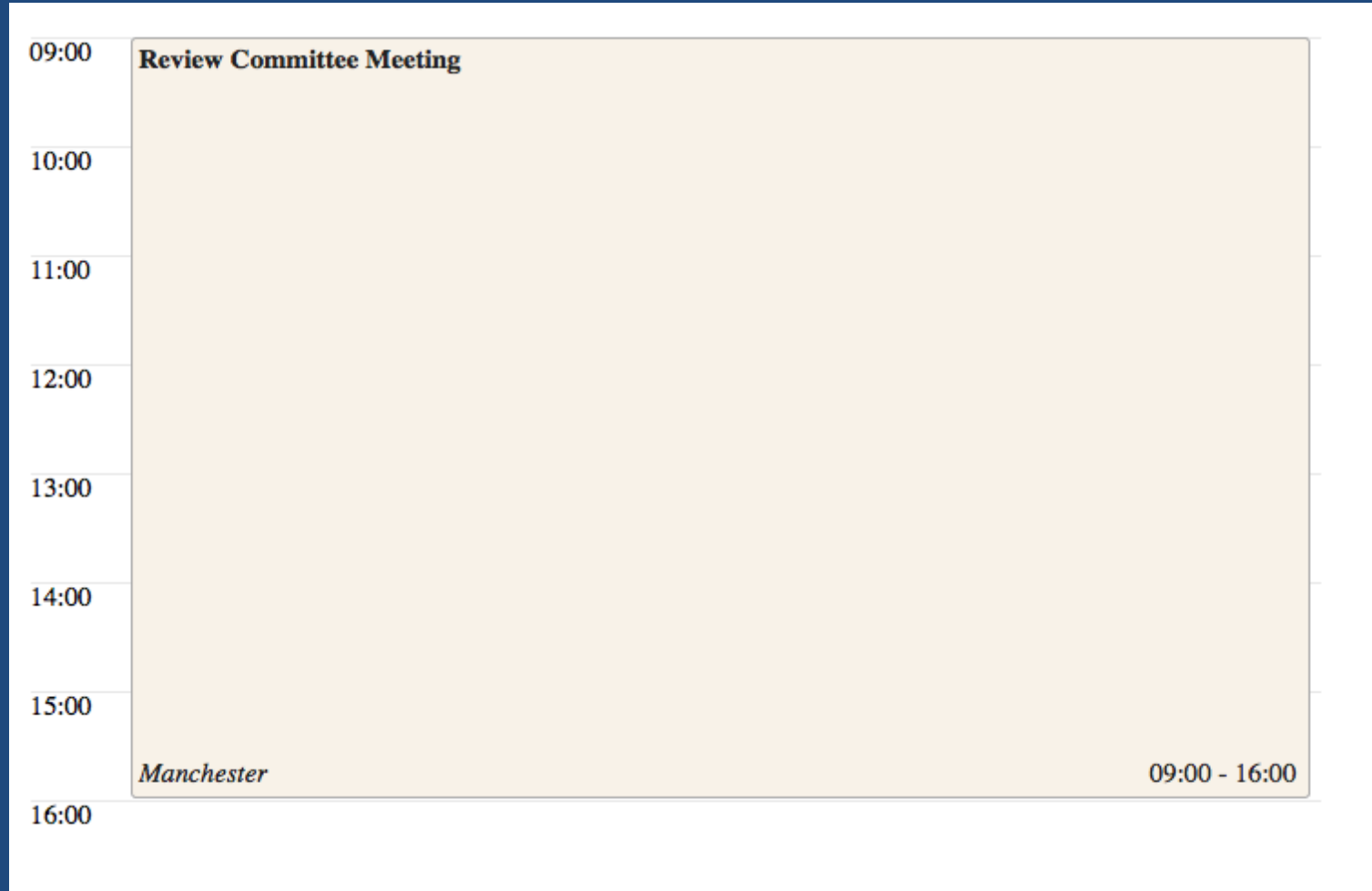
# Agenda (Tuesday)

Tue 18/10		Wed 19/10	Thu 20/10	All days
<a href="#">Print</a> <a href="#">PDF</a> <a href="#">Full screen</a> <a href="#">Detailed view</a> <a href="#">Filter</a>				
12:00	<b>Lunch</b>			
13:00	<i>Manchester</i>			12:00 - 13:30
	<b>Introduction to the review</b>		<i>SOLDNER-REMBOLD, Stefan</i>	
	<i>Manchester</i>			13:30 - 13:40
14:00	<b>Introduction to the context and history of project</b>		<i>WEERTS, Harry</i>	
	<i>Manchester</i>			13:50 - 14:05
	<b>CLIC physics potential</b>		<i>WELLS, James</i>	
	<i>Manchester</i>			14:15 - 14:50
15:00	<b>Introduction to the CLIC accelerator and to the sources of beam-induced background</b>		<i>SCHULTE, Daniel</i>	
16:00	<b>Detector performance requirements and detector concepts</b>		<i>BLAISING, Jean-Jacques</i>	
	<i>Manchester</i>			15:35 - 16:05
	<b>Coffee break</b>			
	<i>Manchester</i>			16:15 - 16:35
17:00	<b>Impact of background on the detector</b>		<i>SAILER, Andre</i>	
	<i>Manchester</i>			16:45 - 17:10
	<b>Suppression of beam-induced background and influence on the physics results</b>		<i>THOMSON, Mark</i>	
	<i>Manchester</i>			17:20 - 17:55

# Agenda (Wednesday)

09:00	<b>Review Committee Meeting</b>	
	Manchester	08:30 - 09:30
	<b>Magnet system and detector movements</b>	GERWIG, Hubert
	Manchester	09:30 - 09:55
10:00	<b>Forward region and polarisation</b>	ELSENER, Konrad
	Manchester	10:05 - 10:25
	<b>Coffee Break</b>	
	Manchester	10:35 - 10:55
11:00	<b>Vertex detector at CLIC</b>	DANNHEIM, Dominik
	Manchester	10:55 - 11:20
	<b>CLIC_ILD tracking (technology + performance)</b>	TIMMERMANS, Jan
	Manchester	11:30 - 11:50
12:00	<b>CLIC_SiD tracking (technology + performance)</b>	STANITZKI, Marcel
	Manchester	12:00 - 12:20
13:00	<b>Lunch</b>	
	Manchester	12:25 - 13:25
	<b>Calorimeters (ECAL, HCAL technology + performance)</b>	SEFKOW, Felix
	Manchester	13:25 - 13:55
14:00	<b>Electronics</b>	KLUGE, Alex
	Manchester	14:05 - 14:25
	<b>Particle flow performance at CLIC</b>	MARSHALL, John
	Manchester	14:35 - 14:50
15:00	<b>Physics observables and flavour tagging</b>	STRUBE, Jan Fridolf
	Manchester	15:00 - 15:20
	<b>Coffee Break</b>	
	Manchester	15:30 - 15:45
16:00	<b>Results and implications of benchmark studies</b>	SIMON, Frank
	Manchester	15:45 - 16:25
	<b>What are the next steps?</b>	LINSSEN, Lucie
	Manchester	16:35 - 16:50

# Agenda (Thursday)



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- The review should be an interactive process, with questions asked during the presentations (within reason).
  - The review committee might formulate more questions based on the discussions and presentations over the next days.
  - At the end of the process, the Review Committee will send a written report to the editors of the CDR.