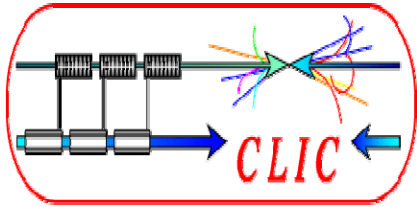


# *Summary of Cost & Schedule Working Group*

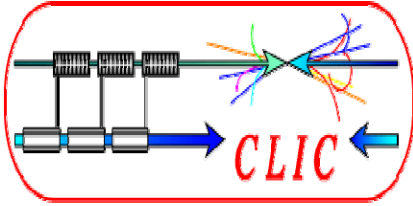
Hans Braun, John Carwardine, Katy Foraz, Peter Garbincius, Tetsuo Shidara, Sylvain Weisz



## *Highlights*



- **First time the groups had got together**
- **Discussions were very positive and constructive.**
- **Strong interest in continuing discussions and find ways to work together.**
  
- **Some specific items have been identified that we can work on together.**

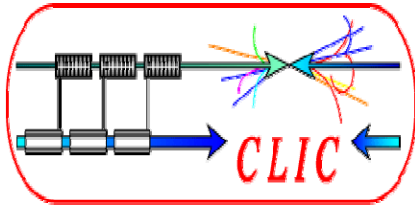


## *Discussion topics*



- **10:15-10:20 – Reminder of ILC Confidentiality Protocol**
- **10:20-10:55 – ILC Presentation**
  - **RDR Estimate – instructions, format, basis, status, evolution into TDR est. examples: Klystrons & Modulators, Beam Delivery System, Schedules**
  - **ILC Project Management Plans**
  - **Discussion of needs and desires**
- **10:55-11:30 – CLIC Presentation on status and discussion of needs & desires**
- **11:30-11:45 – Integrating parametric studies**
- **11:45-12:15 - Common CLIC-ILC Cost & Schedule Activities**
  - **Goals – what we need to work on**
  - **Plan on how to work together**
  - **What can we expect to deliver over what timescale?**

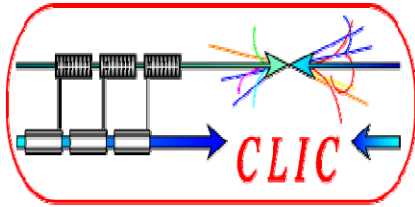
*Note: we could not arrange a joint parallel session with Civil Engineering & Conventional Facilities (maybe this can be done by webex...)*



## *Discussions*



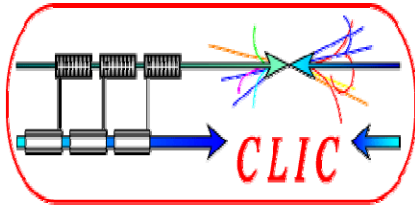
- **Both groups have focused on estimating costs from the bottom up.**
- **More work to be done on integrated system cost optimization, eg**
  - **Space utilization, other civil requirements.**
  - **Cooling water delta-T**
  - **Magnet design guidelines and families.**
- **Discussion on how best to combine cost risks from individual elements to a global cost risk.**
- **How does the business model impact cost...?**
  - **ILC: assumes inherently based on in-kind contributions.**
  - **CLIC: assumes centralised funding model**



## *Tools*



- **Both groups have so far used Excel as primary costing tool.**
- **Both groups are looking for tools for integrating cost estimate data and to do parametric analyses, eg**
  - **Raw material costs, inflation rates, effort costs, etc**
  - **Changes in scope or requirements.**
  - **Consensus that Project Management cost/scheduling tools are not inherently the right tools for managing and analysing the cost estimates.**
- **ILC is planning to migrate to enterprise project management tools during ED phase (Primavera)**



## *Next steps...*



- **Establish a certain functionality for cost data analysis, eg parametric studies, risk assessment**
  - Aim to develop and share tools together
  - Start small, migrate towards enterprise tools.
- **See benefit in comparing costs for certain items, eg**
  - Modulator costs.
  - (confidentiality means we will need management approval)
- **Compare high level methodologies & assumptions**
  - Understand each others' methodology.
  - Understand how to compare cost estimates in a straight forward way.
  - Avoid unnecessary duplications of effort.