

# VELO Upgrade discussion meeting

24/03/10

Focus on the foil



Strawman Layout

CO<sub>2</sub> vs LN<sub>2</sub> cooling choice

Module Cooling Structure  
and hybridisation options

Link Technology

Planar Silicon option

Diamond sensor option

3d sensor option

Simulation software

Electronics R&D

Infrastructure

Foil R&D

Strip Option

Reminder of work package structure

<https://lbtwiki.cern.ch/bin/view/VELO/VELOUpgradeRnD>

Structure set up to try to ease communication by clearly indicating contact persons, and to define the R&D actions and timescale

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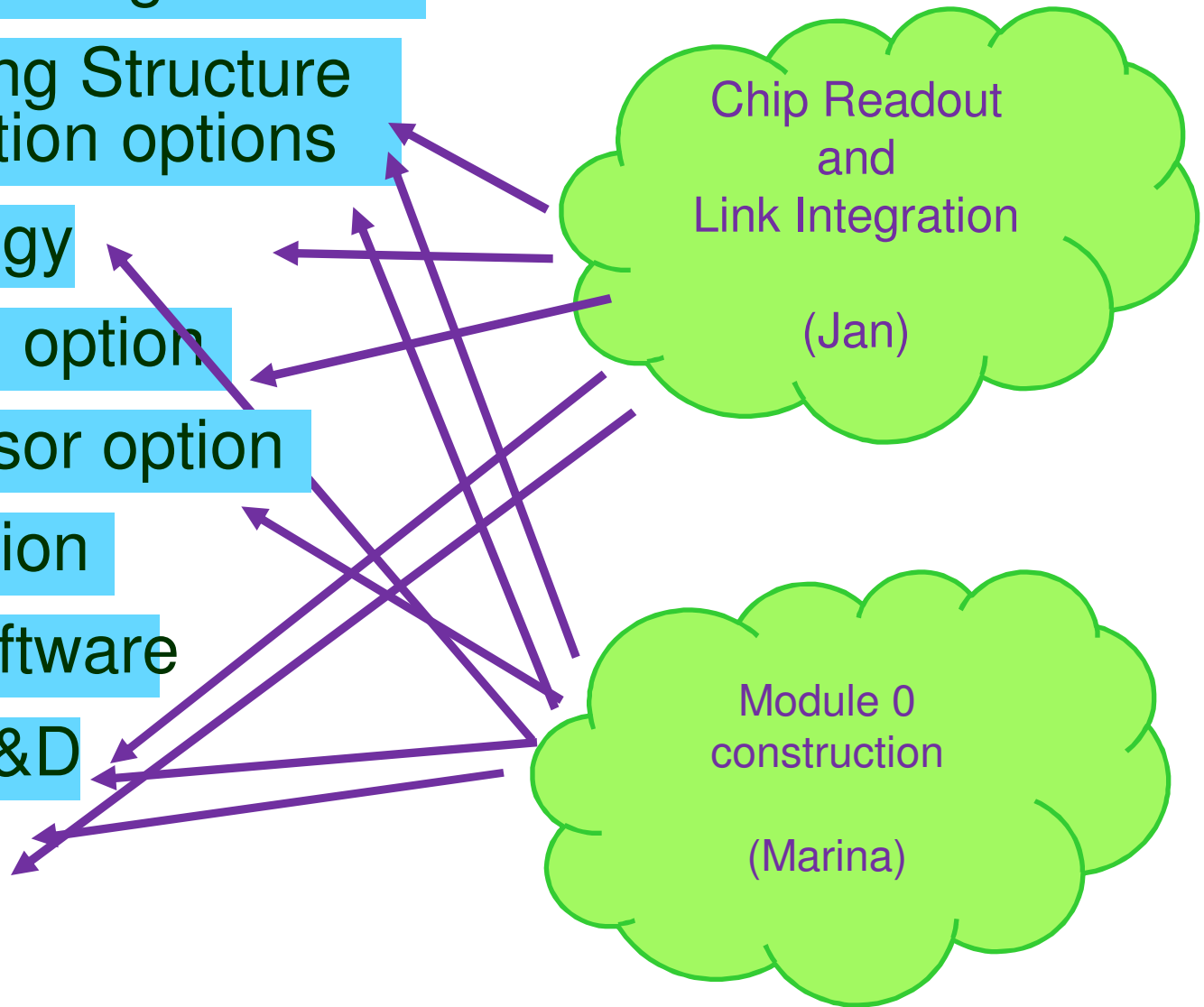
Chip Readout  
and  
Link Integration

(Jan)

Module 0  
construction

(Marina)

(arrows are indicative)



# Many thanks to the brave coordinators

- Marco Gersabeck
- Steve Blusk
- Val O'Shea + Tony Smith
- Dave Bailey
- Gianluigi Casse
- Marina Artuso
- Chris Parkes
- Tomasz Skwarnicki
- Ken Wyllie
- Richard Plackett
- Ray Mountain
- Abraham Gallas

- Gather info from survey, coordinate actions
- Establish overall plan and time schedule
- Maintain web page with basic information  
<https://lbtwiki.cern.ch/bin/view/VELO/VELOUpgradeRnD>
- Attend meetings
- Contribute section to LoI – outlines are being requested by April 14<sup>th</sup> upgrade meeting

# A few upcoming dates

- April 14: General upgrade meeting, no VELO upgrade meeting
- April 21: Velopix design progress
- April 28: Software focussed meeting
- VELO electronics workshop to be organised
- Irradiation campaign starting shortly (contact Gianluigi)

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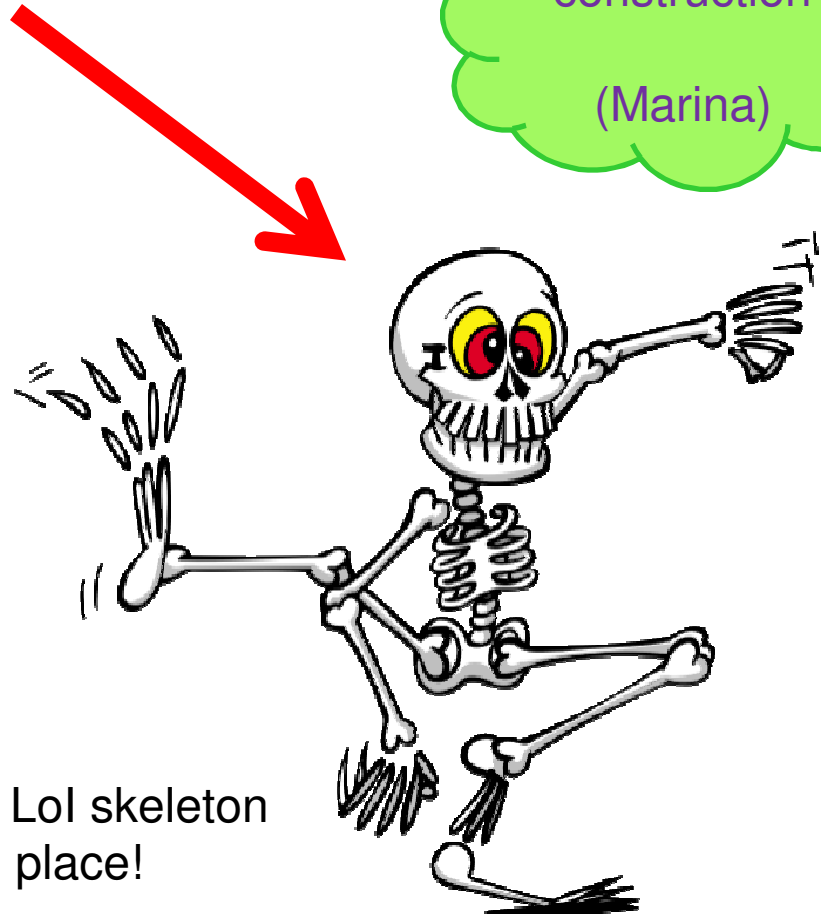
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Our Lol skeleton  
is in place!

# Today we focus on the foil

## Coordinator of this wp – Ray Mountain

- This could be seen as \*THE\* critical component of the upgrade
- Given that we have to manufacture one anyway what might be the advantage of going for the L shape?
- New foil must be integrated with LHC and SLHC constraints
- Material, thickness, design, physics impact
- How to get a quick feedback on design variations and their physics impact?
- Feedback from this critical for WP1 – strawman design – being coordinated by Marco Gersabeck