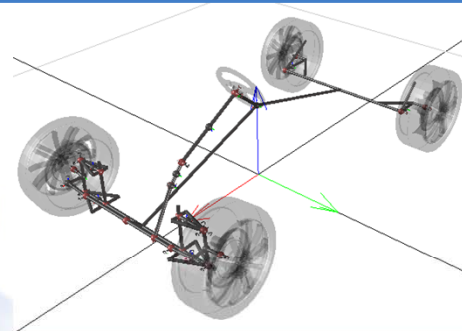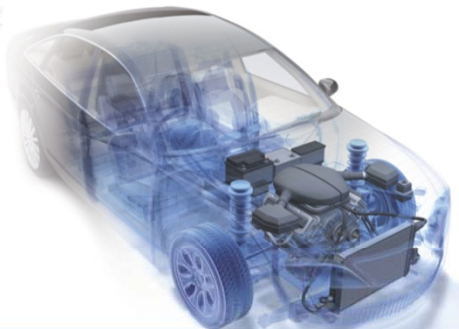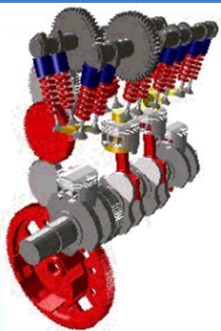# Summary of Activities

Jürgen Gerhard, David Hare

Outline

- About Maplesoft

- Role in LHCPhenoNet

- Team

- Meetings

- ESR Training

- Schedule

- Visa

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About Maplesoft

- Leading provider of high-performance software tools for engineering, science, and mathematics since 1988

- Main products:
  - **Maple**: technical computing and documentation environment
  - **MapleSim**: high-performance, multi-domain modeling and simulation tool

- Since 2009 a 100% subsidiary of Cybernet Systems Co., Japan

- Based in Waterloo ON, Canada. 120 employees. About 1 million customers world wide

- Research collaborations with universities and research institutes world wide; co-op and internship programs

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Role in LHCPhenoNet

- Provide research and skills training on mathematical software development

- Host trainee students

- Serve on Supervisory Board

- Participate in meetings

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Team

Dr David Hare, Manager,
    Mathematical Software Development

- PhD Mathematics, UBC, 1987
- Joined 1998
- Team of 8 developers

Dr Jürgen Gerhard, Director, Research

- PhD Mathematics, U Paderborn, 2001
- Joined 2003
- Team of 4 researchers

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Meetings

Participation in the following LHCPhenoNet events:

- LHCPhenoNet Kick-off Meeting, Valencia, Spain,
1-4 February 2011
Presentation on *Maplesoft and LHCPhenoNet*

- LHCPhenoNet Annual Meeting, Durham, UK,
19-22 March 2012
Presentation on *Maple + Computer Grid*

- LHCPhenoNet School on Integration, Summation and Special Functions in Quantum Field Theory, RISC Linz, Austria, 9-13 July 2012
Presentation on *Polynomial GCDs and Factorization*

- This meeting

ESR Training

- Duration 3 months

- 1 week introduction to software tools and development environment, then training on the job

- Weekly meetings with supervisor, a senior Maplesoft developer

- Student will be given a specific development task (possibly continued work from previous student)

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Possible Trainee Projects

- New MapleSim components

- Application examples for Maple and MapleSim / Apps

- Extension of Student packages and tutors

- Extension of Physics package

- Extension of symbolic summation algorithms

- Numerical evaluation of special functions

- Parallel and grid computing

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Training Schedule

Originally:

- Lucia Hosekova, Oct-Dec 2012

- Xuan Chen, Oct-Dev 2012

Likely postponed to Jan-Mar 2013 due to visa issues

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Obtaining visa

Participants in the training program must obtain a valid work visa for Canada, through one of the following programs:

- International Experience Canada (IEC)
  - Limited capacities
  - Does not apply to all nationalities

- IAESTE or AIESEC
  - Student must become a member
  - Application process must be started from country of nationality

Apply early, recommended: 6 months before internship

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Thank you