

Start

One experiment: **red** LED in liquid air

What will happen?

What happens?

Why does it happen?

Another experiment: **yellow** LED in liquid air

What will happen?

What happens?

Why does it happen?

???

The teacher seminar

- Strategies to transfer the knowledge and materials of Supercomet2 to the teachers **and** the students.
- In 2,3 or 4 sessions, each +/- 4 hours long.
 - Physics content
 - Didactical content
 - ICT content.

The teacher seminar

Pause	20			
• Module "Introduction to superconductivity"	40	TM7 " Building activities " for this chapter	Teacher Guide, PPT, CA, video's	SUMMARY to be made
• Teaching methods : evaluation during learning: discussion	20	Active learning, discussion led by the teacher coach;		
• Gender linked questionnaire; discussion	20			
• Evaluation+ discussion of the session	10		Short questionnaire	Harvey M.
	230			
Third session: ½ day TOPIC: For better teaching with SC2				
• Welcome, schedule of the session	10	Starter experiment: Show piece of superconducting wire, how it is built		Superconducting wire??
• Summary of first two sessions via PowerPoint presentations on modules 1,2 and 3 available for class room use; results of Physible; description of teaching methods	50	TM8 " Interactive lecture " + TM5 " Group work " Exercise: curriculum mapping	LowTechExp.zip Local curricula SC2_TS3_CurMapping_20070711_WP.doc	
• Module D: "Explanation of Superconductivity"	50	TM9 " Spider ": students are active, but teacher controls progress in knowledge closely (this is necessary in this difficult chapter)	Teacher Guide, CA, Video's of experiments	

The teachers

- Are the learners and are treated as students: the experience make them better adapt and adopt for own use
- Can discuss the methods with colleagues
- Are informed on/get
 - Content of materials
 - All different kinds of materials
 - Teaching methods

Materials (1)

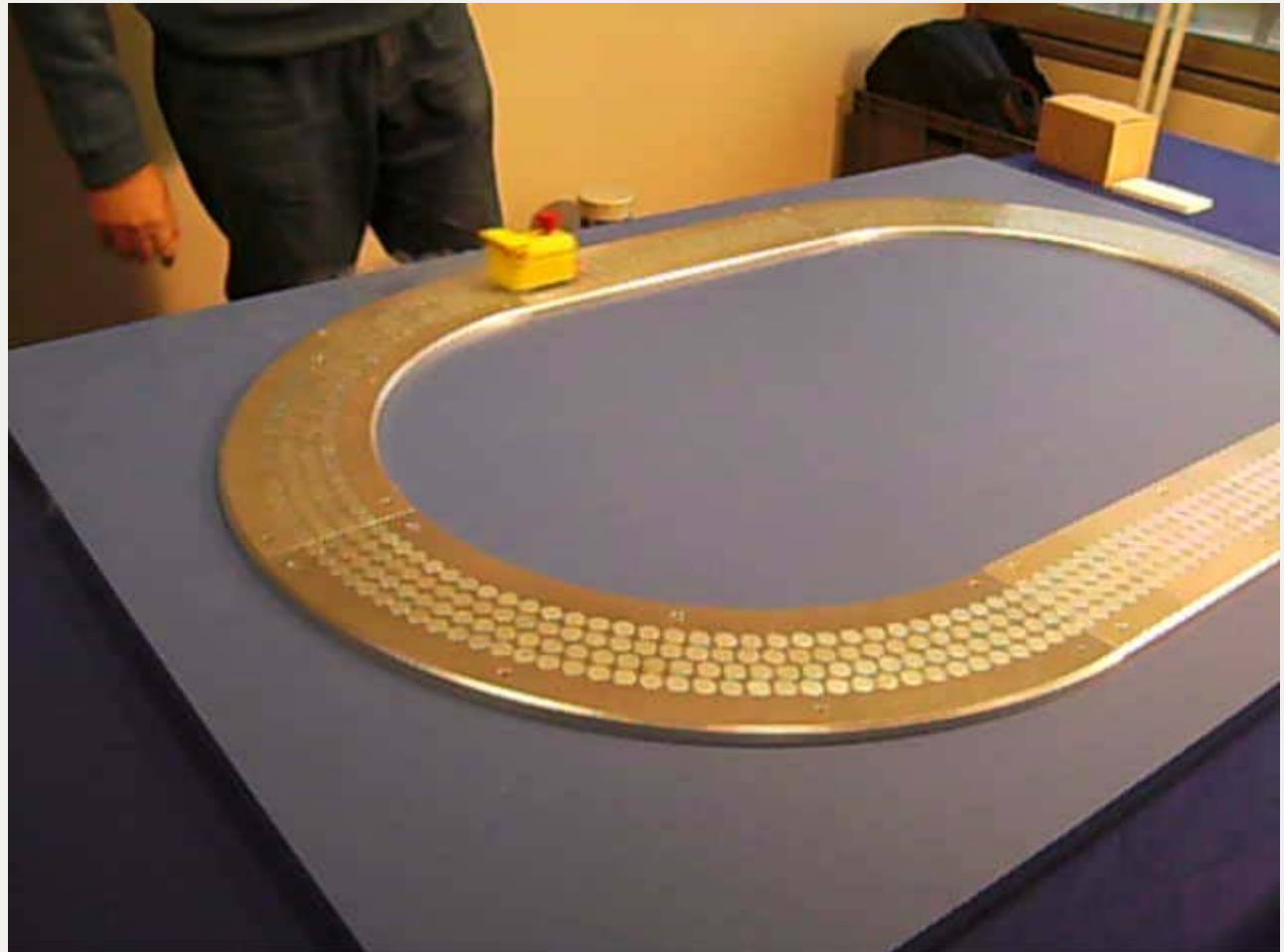
- The **computer application** is used in all sessions, and all modules of it are studied in dept, in different ways.
- The **teacher guide** is used continuously and also PowerPoint presentations give additional information, both for students and for teachers, on superconductivity and on all aspects of teaching the subject.
- The **e-platform Physible** will be used to increase interaction between learners and how it can be used as a library of teaching materials, ready for exchange.
- Physics without **experiments** is not very lively: we carry out a series of easy but brain teasing experiments, adequately used where useful or necessary.

Materials (2)

- A summary of all teaching methods is provided, as well as **evaluation tools**, additional questionnaires and media files.
- During the teacher seminar we guide all participants carefully along all these items and let them **experience the materials** in an intense way.
- The **high tech experiments** are filmed and, if a partner is able to, they can be performed lively for the teachers (and students).

High tech experiments

Interactive
lecture



Back to the experiments

- Red LED
- Yellow LED

Thank you