

ETH zürich



University of
Zurich ^{UZH}



EPS Young Minds - Zürich

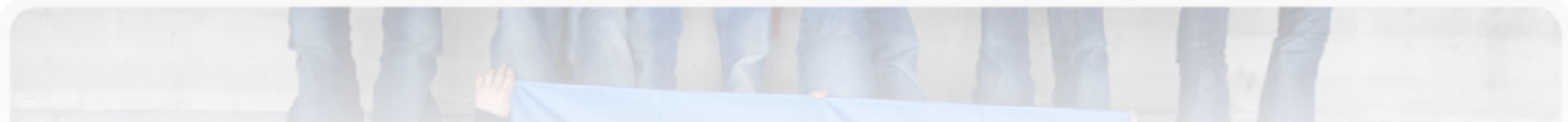
Zachary Lapin

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Mulhouse 2013



EPS Young Minds – Zürich



IONS 13 – Switzerland (w/ OSA)



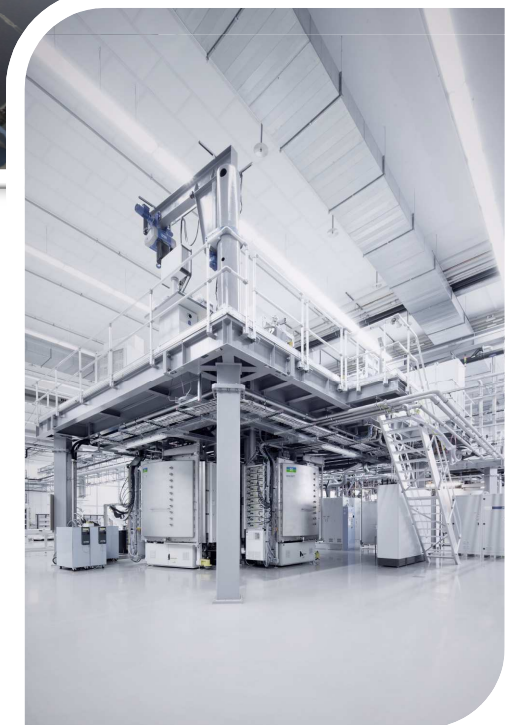
IONS 13 – Switzerland (w/ OSA)

- Participants
 - 180 submissions
 - 99 accepted
 - 89 participants
 - 32 nationalities
- Sponsors
 - ETH & EPFL
 - 6 societies
 - 14 companies



TEL Solar – Company Visit

- 13 Participants
 - 10 PhD
 - 2 Master
 - 1 Post Doc
- 2 Universities
 - ETH Zürich
 - EPFL
- 0 Pictures



Research talks (w/ SPIE & OSA)

- Great turnout!
 - 15
- Informative
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- Yummy



chapter presents:

Talks

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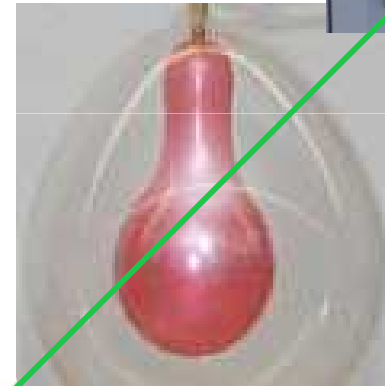
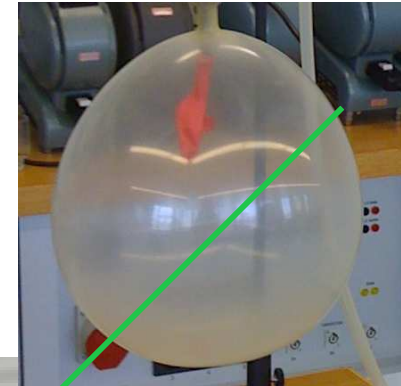
*Scientifica*¹³ outreach (w/ SPIE & OSA) Zürcher Wissenschaftstage

- Exhibition of the ETH Zürich and University of Zürich for the Swiss public
- This year's theme: "risk"
- Dates: **30.8 – 1.9.2013**
- Last years total visitor count: **21,000 people**



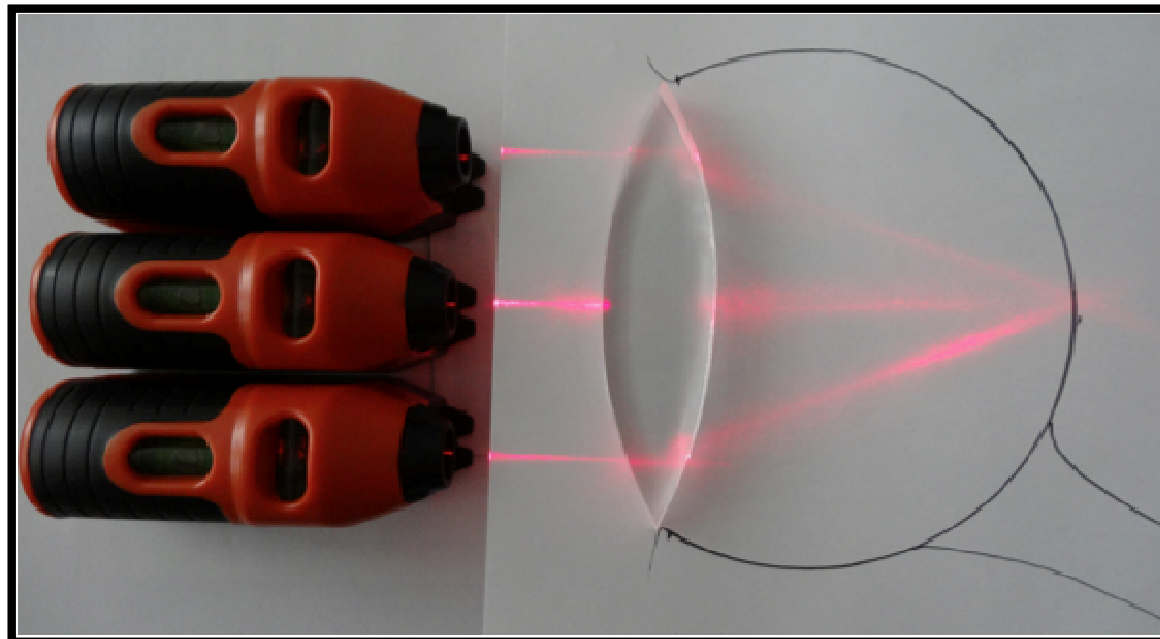
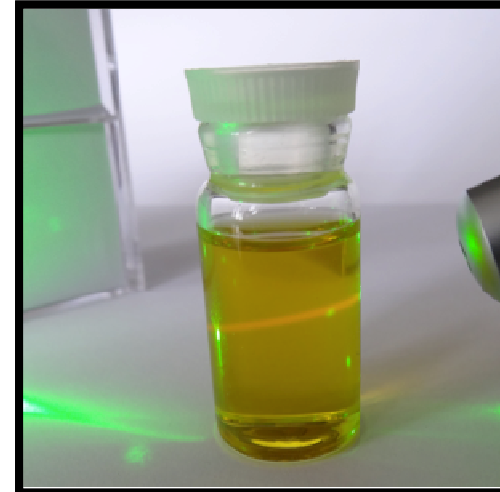
The Balloon Pop

- Demonstration of laser heating
 - Absorption!
- Fun!
 - Engaging for all

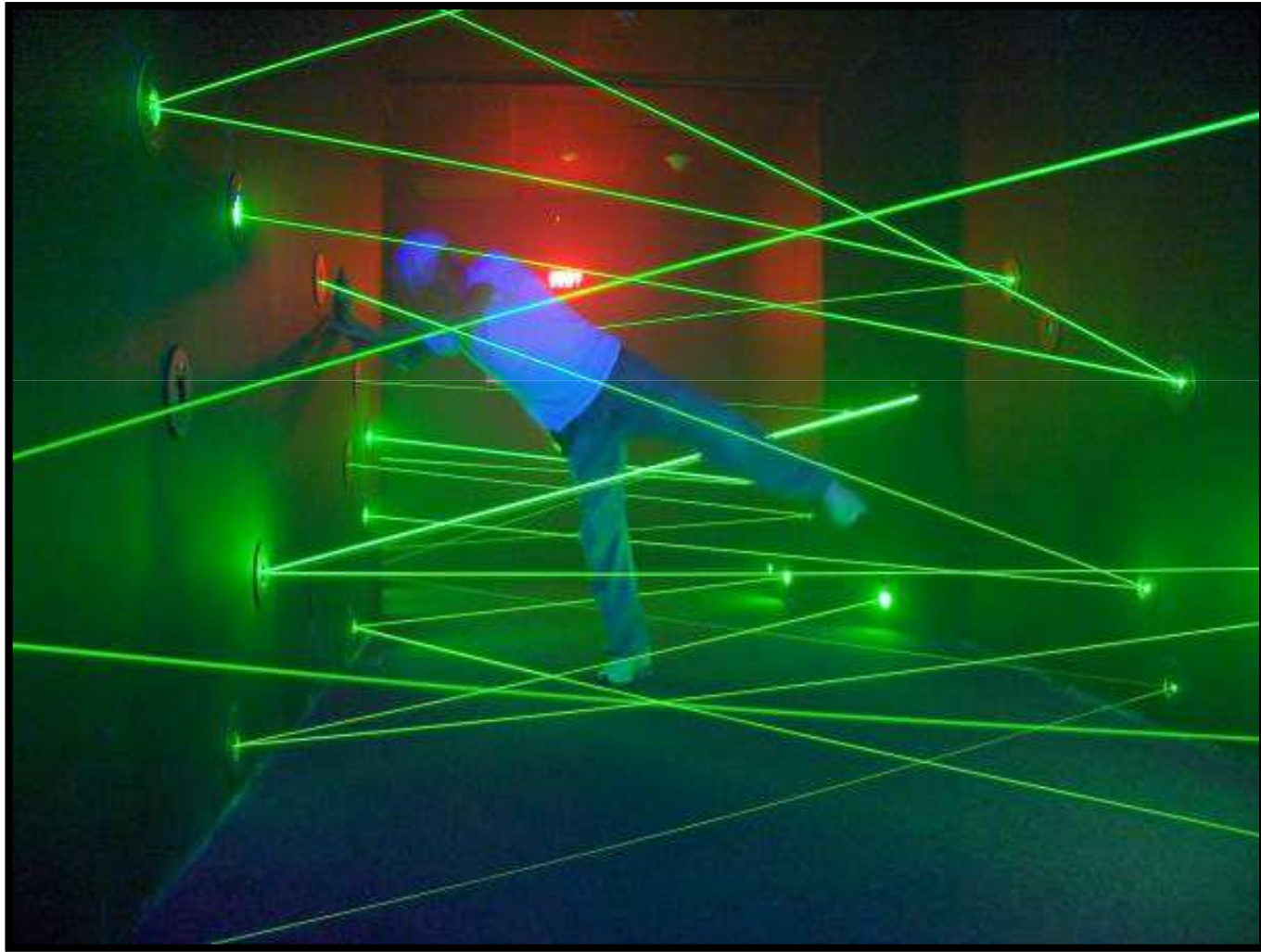


The Hands-On Lab

- Blue & green lasers
 - Red olive oil fluorescence
- Mirrors & home-made lenses
 - Laser reflection & refraction



The Laser Maze



Outreach

Goal:

Develop a sustained outreach program to inspire and support the study of the physical sciences.

Target audience:
High school students and beyond.

How can we inspire and support the study of the physical sciences?

Website tutorials

Goals

AUDIENCE
People have different interests and different backgrounds. In order to insure the wide-spread use of our website, we will provide tutorials on a range of topics, with categories ranging from the basic principles of physics to recent Nobel Prizes, we will reach-out to new physics students, curious adults and everyone in-between.

ACCESSIBILITY
Physical concepts and their importance in our daily experiences will be brought to life in a way, and through a medium, that is accessible by anyone with a computer. Teenagers and seniors alike will effectively navigate and learn from our tutorials.

SUSTAINABILITY
The resources necessary for a website are available and, any additional costs associated with hosting these tutorials is minimal. This means that our outreach will always be sustained, even if the rate of new content fluctuates with the seasons.

NETWORKING
Internet offers an excellent platform for networking opportunities. Our website will benefit from the rich cultural diversity of our society to make the tutorials available for everyone. You can help us in the development of this project!

GLOBAL IMPACT
Online programs are great and can have quite a large impact on participants; however events are often short-lived and available to only a limited audience. By utilizing our webpage, we will provide a scientific outreach program accessible the world over, 24 hours a day, 355 days a year. An outreach that knows no limits.

EPS Young Minds - Zürich Sustained Outreach
Zachary J Lapin
zlapin@ethz.ch

Young Minds Section Outreach Tutorials

ETH zürich **University of Zurich** **Young Minds**

Outreach – Website Development

Online Tutorials

- Categories
 - Recent Nobel prizes
 - Quantum optics, the Universe, graphene...
 - Physical principles
 - Optics, mechanics, solid state, quantum, electronics ...
 - Cutting-edge research
 - Quantum information, 2D materials ...



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[Outreach](#)

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Young Minds Section Outreach Tutorials

Just Added

June 17, 2013 - [Noble prize – The quantum world](#)

Dorilian Lopez-Mago explains the 2013 Physics Nobel Prize and what it means for you. [[read more](#)]

Categories

Nobel Prizes

[[Nobel archive](#)]

June 17, 2013 - [The quantum world](#)

Dorilian Lopez-Mago explains the 2013 Physics Nobel Prize and what it means for you. [[read more](#)]

June 10, 2013 - [The expanding universe](#)

Dorilian Lopez-Mago explains the 2012 Physics Nobel Prize and what it means for you. [[read more](#)]

Physical Principles

[[Principles archive](#)]

June 15, 2013 - [A coherent introduction to coherence theory](#)

Shawn Divitt tackles coherence in an interactive tutorial. [[read more](#)]

Cutting-Edge Research

[[Research archive](#)]

June 12, 2013 - [Sub-diffraction imaging](#)

Zachary Lapin explains recent work in near-field optical microscopy. [[read more](#)]