



Joint PSI, UZH and ETH Zurich PhD Seminar 2020

Organised by P. Crivelli, C. Grab and A. de Cosa
HS 2020 8/9 September 2020

ETH zürich

Agenda - today

► 2 days agenda and 22 talks in total

- each talk is assigned 30 minutes:
 - 20 min + 10 min for discussion

► Talks should all be online on :

<https://indico.phys.ethz.ch/event/20/>

- send talk to Annapaola or Paolo for uploading, if you cannot do it yourself

	Welcome	08:45 - 09:00
09:00	Sensitivity Studies for the Planned X(16.7)-Boson Test with the MEG II Apparatus	Patrick Schwendimann
		09:00 - 09:30
	Search for nonresonant Higgs boson pair production in final states with two bottom quarks and two photons in pp collisions at $\sqrt{s} = 13$ TeV	Nadezda Chernyavskaya
		09:30 - 10:00
10:00	Event shapes in Deep Inelastic Scattering	Jonathan Mo
		10:00 - 10:30
	Coffee break	10:30 - 11:00
11:00	Vector-Like Leptons in Light of the Cabibbo Angle Anomaly	Claudio Andrea Manzari
		11:00 - 11:30
	Photon production @ the LHC with realistic photon isolation	Robin Schuermann
		11:30 - 12:00
12:00	Lunch	12:00 - 13:30
	A liquid xenon purity monitor for the DARWIN Demonstrator at UZH	Yanina Biondi
		13:30 - 14:00
14:00	3D Electric Field Simulations for XENONnT	Ricardo Peres
		14:00 - 14:30
	Update on the angular analysis of the $B \rightarrow K^* e e$ decay	Zhenzi Wang
		14:30 - 15:00
15:00	Coffee break	15:00 - 15:30
	Radiation damage : permanent tracks left by dark matter?"	Steven J. Lee
		15:30 - 16:00
16:00	Looking for axion-like dark matter candidates with nEDM	Solange Emmenegger
		16:00 - 16:30
	Development of a Caesium magnetometer array for the n2EDM experiment	Duarte Pais
		16:30 - 17:00
17:00		

Agenda - tomorrow

- ▶ 2 days agenda and 22 talks in total
 - each talk is assigned 30 minutes:
 - 20 min + 10 min for discussion
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09:00	SUSY-QCD Corrections to Pseudoscalar Higgs Production via Gluon Fusion	Lukas Fritz
		09:00 - 09:30
	Rational Terms at Two Loops	Hantian Zhang
		09:30 - 10:00
10:00	Towards establishing NP in amplitude analysis of $\bar{B}^0 \rightarrow \bar{K}^* \ell \ell$	Michele Atzeni 🔗
		10:00 - 10:30
	Coffee break	10:30 - 11:00
11:00	The calibration system of the LEGEND-200 experiment	Yannick Muller
		11:00 - 11:30
	Detection system for the measurement of the hyperfine splitting in muonic hydrogen	Laura Sinkunaite
		11:30 - 12:00
12:00	Lunch	12:00 - 13:30
	The XENONnT direct Dark Matter detection experiment: assembly and commissioning.	Giovanni Volta 🔗
		13:30 - 14:00
14:00	Joint Measurement of the Muon Neutrino and Antineutrino Charged Current Cross Sections on Carbon in the T2K Near Detectors	Caspar Schloesser
		14:00 - 14:30
	Thin-disk laser for the measurement of the hyperfine splitting in muonic hydrogen	Manuel Zayen
		14:30 - 15:00
15:00	Coffee break	15:00 - 15:30
	The NA64 experiment: search of Dark Matter at the CERN SPS	Emilio Depero
		15:30 - 16:00
16:00	Progress towards Measuring the Lamb Shift of Muonium and Antihydrogen	Gianluca Janka 🔗
		16:00 - 16:30
	STXS VHbb search at LHC	KRUNAL GEDIA et al. 🔗
		16:30 - 17:00
17:00		

General Comments

► Content:

- Think about **what you want** the others to learn from you.
- **Amount of details:** concepts versus many technical details.
- **Results** : Concentrate on the essential points
- **Summary:** what's the "**take-home physics message**"?



► Style:

- Figures: explain figures and give audience time to digest
- Visual aids: slides, pointer, ... not too many distractions
- Speaking voice: loud, clear, slow; use pauses and emphases.
- Body language: keep eye contact; act as natural as possible.
watch your posture (we remind this point to the next PhD Seminar).

► Questions:

- When you ask questions, give audience time to think
- Repeat question or paraphrase it

credits: C.Grab - PhD Seminar 2016

Presenting and discussing work!

Main point of a seminar: presenting and discussing scientific work

► **How to stimulate discussion and questions? Here some suggestions:**

- For each session we will have **2 or 3 students chairing**
 - each one chairing a specific talk (intro plus questions moderation)
 - each chairperson is charged with ASKING at least **3 scientific questions** (and at least ONE PER TALK).
 - and also has to come up with **1 non-trivial comment** about the presentation style – in constructive manner !
- Of course everybody else is equally invited to ask questions or make comments.
- Other suggestions on how to increase discussions?

Chairpersons

▶ Tuesday 8.9.20:

- Session 1: Claudio Andrea Manzari, Robin Schuermann, Yanina Biondi
- Session 2: Laura Sinkunaite, Giovanni Volta
- Session 3: Steven J.Lee , Solange Emmenegger , Vincent Pais Duarte Alexandre
- Session 4: Lukas Fritz, Hantian Zhang, Michele Atzeni

▶ Wednesday 9.9.20:

- Session 1: Caspar Schloesser, Manuel Zayen, Krunal Gedia
- Session 2: Patrick Schwendimann, Jonathan Mo
- Session 3: Nadezda Chernyavskaya, Emilio Depero , Gianluca Janka
- Session 4: Ricardo Peres, Zhenzi Wang , Yannick Muller