

## Student Seminar

### GRAPPA and Theoretical Physics MSc tracks

*“At the intersect of high-energy particle physics, astroparticle physics, and astrophysics”*

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**GRAPPA INSTITUTE**

Gravitation AstroParticle Physics Amsterdam





## Goal of the Seminar – Practice Research

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- Search for and read publications: study a topic of current state-of-the-art research for a short time (1-3 weeks)
- Explain your topic and present the state of the art in a presentation to the other students
- Discuss with them, answer their questions, learn to present and defend your knowledge



- A total of six topics will be presented by you
- We will grade the presentation (this is your pass or fail):
  - Content
  - Presentation itself
  - Understanding of the subject
  - Activity during discussion
- We assume full-time availability for four weeks



- **Presentation sessions:**
  - Split the topic into two presentations of 45-60 minutes each
  - Up to you how to organize presentation within your group
  - Up to you how you present: Powerpoint, Keynote, Open Office, LaTeX, white/black board, etc – as you like and feel most appropriate
- This leaves more than 60 minutes of discussion and question time with the rest of the students




- Three days a week 9:00-13:00 either study and prepare presentation with our supervision and guidance (up to you), or attend presentations (your own and those of the others), all in room B0.201 (Mon & Fri) and A1.04 (Wed)
- Tuesdays and Thursdays, and all afternoons are up to you (still we assume you work on your topic up until your presentation)
- Presence mandatory for all presentations, strongly encouraged during the supervised sessions (next slide)





# June 2013

Su Mo Tu We Th Fr Sa

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2	3	4	5	6	7	8	David Gabriele
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	Shin'ichiro Fabio
23	24	25	26	27	28	29	

 Preparation time  
Supervision available

 Presentation time  
Presence mandatory

 Your time, part of the 6 EC  
Devote to this course!



1. Dark matter searches at the LHC (presentation 10 June)
2. Supernova remnants in gamma rays and acceleration of Galactic cosmic rays (presentation 12 June)
3. The Higgs discovery and its implications for the Standard Model and cosmology (presentation 14 June)
4. Dark matter annihilation and indirect searches in gamma rays (presentation 24 June)
5. Direct dark matter searches in underground experiments (presentation 26 June)
6. Low and high-energy neutrino physics and astrophysics (presentation 28 June)

June 2013

Su	Mo	Tu	We	Th	Fr	Sa
	1. 9 10		2. 11 12		3. 13 14	15
23	4. 24	25	5. 26	27	6. 28	29



# How to find out stuff about a topic

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- Search research publications:
  - INSPIRE: [inspirehep.net](http://inspirehep.net)
  - arXiv preprint server: [arxiv.org](http://arxiv.org)
  - ADS: [adsabs.harvard.edu](http://adsabs.harvard.edu)
  - Annual Reviews: [Astronomy & Astrophysics](#), [Nuclear & Particle Physics](#)
- Look for recent review papers, watch citations as impact measure
- Contributions at important research conferences:
  - [EPS](#)
  - [ICHEP](#)
  - [Moriond](#)
  - [TeVPA](#)
  - [TAUP](#)
  - [Aspen 2013: Closing in on dark matter](#)
  - [Neutrino](#)
- Ask local experts (but don't steal too much of their time)





- Come talk to us during supervision time!
- Get help, but also feedback whether material you are using is appropriate
- Rooms: B0.201 (Mon & Fri) and A1.04 (Wed)
- People:
  - Shin'ichiro Ando, [s.ando@uva.nl](mailto:s.ando@uva.nl), C4.109
  - David Berge, [berge@uva.nl](mailto:berge@uva.nl), C4.118
  - Gabriele Sabato, [gsabato@nikhef.nl](mailto:gsabato@nikhef.nl), Nikhef
  - Fabio Zandanel, [f.zandanel@uva.nl](mailto:f.zandanel@uva.nl), C4.201