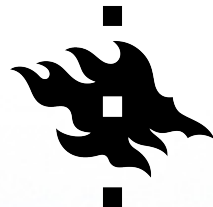


# TEACHING AT THE DEPARTMENT OF PHYSICS

HANNA VEHKAMÄKI & ILKKA HENDOLIN

19.5.2015



UNIVERSITY OF HELSINKI

# CONTACT POINTS I

Opintotoimisto/Academic affairs office

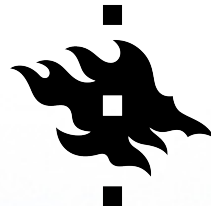
- <http://www.physics.helsinki.fi/english/studying/yhteystiedot.html>

Opintoneuvojat/Student counsellors

- <http://www.physics.helsinki.fi/english/studying/opintoneuvojat.html>

Oppiainevastaavat/Professors in charge of the disciplines

- <http://www.physics.helsinki.fi/hallinto/english/oppiainevastaavat.html>



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# CONTACT POINTS II

Bachelor level HOPS (PSP, Personal study plan) counsellors

- [https://flamma.helsinki.fi/portal/units/matlu?\\_nfpb=true&\\_pageLabel=P11002751551368791501975&contentId=HY313782&placeId=HY312952](https://flamma.helsinki.fi/portal/units/matlu?_nfpb=true&_pageLabel=P11002751551368791501975&contentId=HY313782&placeId=HY312952)

Professors responsible for Master level HOPS (PSP) counselling

- [https://flamma.helsinki.fi/portal/units/matlu?\\_nfpb=true&\\_pageLabel=P11002751551368791501975&contentId=HY313785&placeId=HY312952](https://flamma.helsinki.fi/portal/units/matlu?_nfpb=true&_pageLabel=P11002751551368791501975&contentId=HY313785&placeId=HY312952)

HOPS (PSP) info

- in English  
[https://flamma.helsinki.fi/portal/units/matlu?\\_nfpb=true&\\_windowLabel=T16252121561360920312406&contentId=HY302168&\\_pageLabel=P9806621561360920311893](https://flamma.helsinki.fi/portal/units/matlu?_nfpb=true&_windowLabel=T16252121561360920312406&contentId=HY302168&_pageLabel=P9806621561360920311893)
- In Finnish  
[https://flamma.helsinki.fi/portal/units/matlu?\\_nfpb=true&\\_pageLabel=P11002751551368791501975&contentId=HY312957&placeId=HY312952](https://flamma.helsinki.fi/portal/units/matlu?_nfpb=true&_pageLabel=P11002751551368791501975&contentId=HY312957&placeId=HY312952)



# CONTACT POINTS III

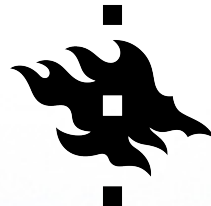
Teaching development & feedback wizards

Ilkka Hendolin ([ilkka.hendolin@helsinki.fi](mailto:ilkka.hendolin@helsinki.fi))

Inkeri Kontro ([inkeri.kontro@helsinki.fi](mailto:inkeri.kontro@helsinki.fi))

Hanna Vehkamäki

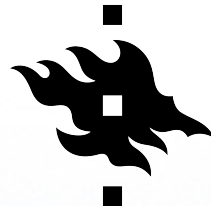
([hanna.vehkamaki@helsinki.fi](mailto:hanna.vehkamaki@helsinki.fi))



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# CONTENT

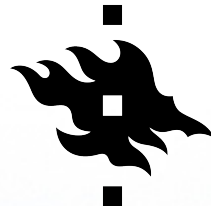
TEACHING DUTIES  
CONTEMPORARY TEACHING METHODS  
PRACTICALITIES  
STUDENT FEEDBACK



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# CONTENT

**TEACHING DUTIES**  
CONTEMPORARY TEACHING METHODS  
PRACTICALITIES  
STUDENT FEEDBACK



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# TEACHING DUTIES

## **Doctoral students / post docs:**

- In principle: 5 % of yearly work = 80 hours
- In practise: two 2-hour exercise groups for one teaching period (about 30 hours of contact teaching and 50 hours of preparation etc.)

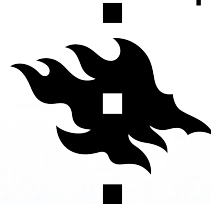
Teaching includes lectures and/or exercise sessions PLUS preparing for lessons, grading, assistant training etc

## **Professors (in principle):**

- 4 hours of lectures per week in each of the four periods =20 ECT per year worth of teaching

## **University lecturers:**

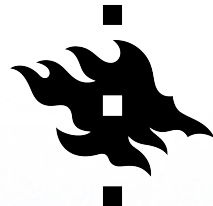
- same as professors + duties as HOPS-supervisors and student counsellors





# WHO WILL MY (FELLOW) ASSISTANTS BE?

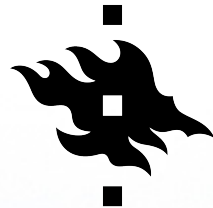
- Each summer teaching resources are sorted out and assistants distributed to courses by a working group
- Department-wide picture: Inkeri Kontro
  - Elementary Particle Physics and Astrophysics: Kimmo Tuominen
  - Materials Physics: Antti Kuronen
  - Atmospheric Sciences: Katrianne Lehtipalo (currently substituting Antti Lauri)
  - Astronomy: Mika Juvela
  - Geophysics: Matti Leppäranta
  - Meteorology: Jouni Räisänen





# CONTENT

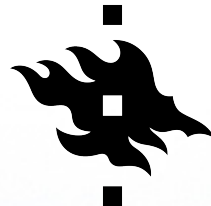
TEACHING DUTIES  
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PRACTICALITIES  
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# EXERCISE SESSIONS AT FUNDAMENTAL COURSES

- Emphasis on current exercises (not looking back at what should have been done)
  - Motivates people to participate, support is given when it's needed
  - Model solutions for past exercises need to be available!
- Emphasis on students' work
  - most of time is used to solve problems in small groups  
→ everyone is active, not just the assistant
- Emphasis on group work
  - There is strong evidence that people learn faster and better when interacting with peers



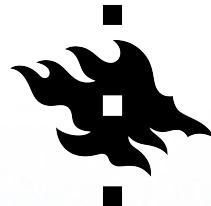
# INTERACTIVE LECTURING METHODS

- Check out: [premo.helsinki.fi/ilkkahe/](http://premo.helsinki.fi/ilkkahe/)
- "Clickers" have been used at basic courses since 2009
  - Very well received, students ask for similar activities at later courses
  - Helps teacher
    - to organize material
    - to know what the students know
  - Helps students by
    - giving them a chance to organize and test their knowledge during teaching
    - giving them break.
- Works without any special equipment:
  - [Socrative](#)
  - [Presemo](#) (in Finnish)
    - a page where you can create a new 'Presemo room' is in English here <http://premo.helsinki.fi/new>



# CONTENT

TEACHING DUTIES  
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# PLANNING STUDIES

## Degree requirements

- <http://www.helsinki.fi/ml/opinto-opas>
- Need help with degree requirements? Contact Pia Saarinen ja Jaakko Hannula
- Student want credits for something she/he has studied elsewhere? Contact Tiina Hasari.

## Courses program for current academic year

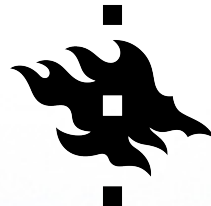
- <http://www.physics.helsinki.fi/english/studying/courses/physics.html>
- **WebOodi** <http://www.physics.helsinki.fi/opetus/opetusohjelma/1415/opetusohjelma.html>

## Courses program for next academic year 2015-2016

- <https://wiki.helsinki.fi/display/fysoppiaine/2015-2016+Fysiikan+kurssisuunnitelma>

## Guidelines for studying schedule

- <http://www.physics.helsinki.fi/opetus/ajoitusmallit.html>



# LECTURE ROOMS

## PHYSICUM

- [salivaraus-physicum@helsinki.fi](mailto:salivaraus-physicum@helsinki.fi) tai
- 02941 50611 / 050 448 4461.
- Tiina Hasari (Tiina Hallikainen until august 2015)
- Round-table rooms ("laskupaja"): [inkeri.kontro@helsinki.fi](mailto:inkeri.kontro@helsinki.fi)

## CHECK VACANT ROOMS

- Timmi4 up and coming

## CHECK SIZE AND EQUIPMENT ETC OF THE ROOMS

- <http://www.helsinki.fi/teknos/opetustilat/kumpula/>

## EXACTUM:

- [hannu.honkasalo@helsinki.fi](mailto:hannu.honkasalo@helsinki.fi) / 02941 51505

## CHEMICUM:

- [leea.sokura@helsinki.fi](mailto:leea.sokura@helsinki.fi) / 02941 50472



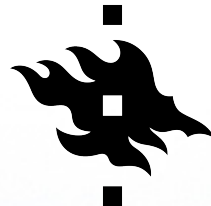
# CODE OF CONDUCT

- In Finnish

<https://wiki.helsinki.fi/pages/viewpage.action?pageId=135735225>

- In English

<https://wiki.helsinki.fi/display/fysoppiaine/Recommended+code+of+conduct+for+fundamental+courses+in+physics>



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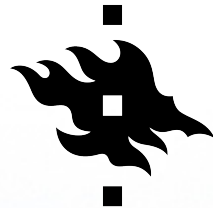
# DEPARTMENTAL EXAMS

- In Finnish

<http://www.physics.helsinki.fi/opetus/laitostentit.html>

- In English

<http://www.physics.helsinki.fi/english/studying/laitostentit.html>



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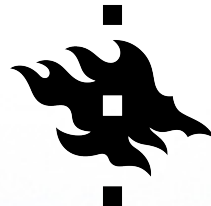
# REGISTERING GRADES

When students have passed a course, send the grade to be registered to

- [fyl-opintosuoritukset@helsinki.fi](mailto:fyl-opintosuoritukset@helsinki.fi)
- Tiina Hasari (beginning in august 2015)
- Course, number of credits, course number, student's name, student number and grade
- More instructions in Finnish: <https://flamma.helsinki.fi/fi/Tissfysiikanlaitoksella/HY315826>

When a student's bachelor or master thesis has been accepted, send the info to

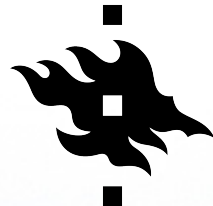
- [fyl-tutkielmat@helsinki.fi](mailto:fyl-tutkielmat@helsinki.fi)
- Jaakko Hannula



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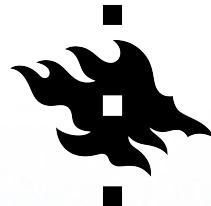
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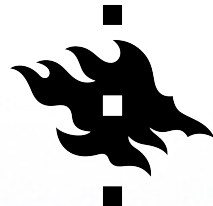
# STUDENT FEEDBACK

- Should be collected and should be utilized – it is very useful!
- Standard version includes Likert-scale (1 to 5) questions about...
  - Lectures and lecturers
  - Exercises and teaching assistants
  - Difficulty of the course
  - Arrangements and other practicalities
  - Student's own activity
- ..and open questions about
  - What were the best things about the course
  - How to improve the course



# COLLECTING FEEDBACK SUCCESSFULLY

- Give a couple of course points as an incentive
- Include feedback in exercises (e.g. as an exercise problem)
- **Give counterfeedback to your students!**
  - Tell the students what they thought
  - Tell what and how you are going to improve in the future
    - i.e. show them that you appreciate their feedback (even though you wouldn't agree with their opinions)



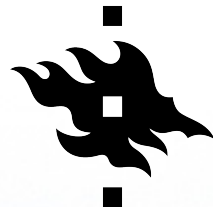
# TYPICAL FEEDBACK (1)

|                                   | Average | Range     | Target | Note   |
|-----------------------------------|---------|-----------|--------|--|
| Lectures and lecturers:           | 3,6     | 2,3...4,5 | > 3,5  | Incl. atmosphere, interactivity, etc., --- not just the personality of the lecturer! |
| Exercises and teaching assistants | 3,7     | 2,8...4,5 | > 3,5  | All trained assistants score > 3!  |
| Difficulty of the course          | 2,5     | 2,0...3,2 | ?      | Nearly all physics courses are considered difficult, no reason for concern           |
| Arrangements etc.                 | 4,0     | 3,8...4,5 | > 4    |  |

Numbers alone don't tell very much

→ You shouldn't overanalyse numbers!

→ "How to fix this course" is found in the open answers

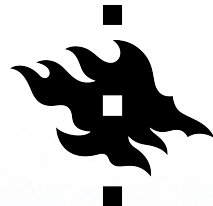


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If only a small fraction of students have given feedback, they are likely to represent the extremes.

# TYPICAL FEEDBACK (2)

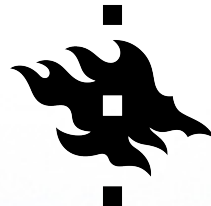
- *What were the best things about the course?*
  - Varied answers, often a good indicator of how the course went!
- *How to improve the course?*
  - Better course materials (always present, independent of the material used)
  - More worked-out examples (almost unavoidable)
  - If some complaints (other than above) occur repeatedly, that could be a sign that something should be done.





# UTILIZING FEEDBACK...

- There's always some student who doesn't like the teacher / teaching style / ...
  - Don't take it personally!
- There are always mixed desires among the students.
  - No need to follow individual student's opinions!
- How do I know which things in feedback should be addressed?
  - Talk to somebody who has seen a lot of course feedback
    - Ilkka Hendolin, Inkeri Kontro, Hanna Vehkamäki
  - Talk to your colleague



# FEEDBACK IN WEBOODI

- <https://weboodi.helsinki.fi/hy/>
- ask [tiina.hallikainen@helsinki.fi](mailto:tiina.hallikainen@helsinki.fi) to activate feedback for your course (before you ask students for feedback!)
  - Click for the left side bar ‘Oma opetus’
  - If the feedback feature has been activated on your past courses, you will see an icon with letter P after the course name and dates, click that
  - You get to see the numerical feedback
  - To see the verbal comments, click ‘Tiedot Exceeliin’ on top right hand corner of the page

Etusivu

[-] Opetus/Opintojaksot  
Haku  
Opinto-oppaat

[-] Omat opinnot

[-] Muut toiminnot  
Henkilötiedot  
Lukuvuosi-ilmoitt.  
Hae opiskelija  
Lv-ilmo valvonta  
Asetukset  
Suunnitellut opintojaksot

[-] Opinto-opas

[-] Kurssipalautteet  
Omat palautteet  
Yhteenvedot  
**Oma opetus**

Ohjeet ja linkit  
Pikaohje  
Palautetta Oodista

Kirjaudu ulos

## Opetustapahtuman palautteen yhteenveto

Palautteen yhteenvettoa katsoessa tulee ottaa huomioon opintojakson toteutustavat, palautteen vastausprosentti ja palautteeseen vastanneiden lukumäärä.

(HUOM! Yhteenvetonäyttö näkyy opiskelijoille vain, jos opettaja antaa siihen erikseen luvan. Kommenttikentän tekstit näkyvät opiskelijoille yhteenvetonäytöllä, joten yhteenvedon näkyminen opiskelijoille vaikuttaa myös siihen.)

Tiedot Exceeliin

- Click ‘tästä’

Sanalliset vastaukset

Lataa html-muotoinen tiedosto [tästä](#)