



NTNU

Det skapende universitet

Organization and info Space Technology I

Overview

- Contact info
- It's learning
- Lecture Plan and exam date
- Curriculum
- Exercises
- Space tech II

Contact info

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I am only working part time at NTNU, I live and have my main job (at Indra Navia) in Oslo.

I come to Trondheim to give lectures, but will otherwise be difficult to find in my office.

The best way to contact me is by e-mail, sms or phone call. And if you wish to talk with me face to face, I will set up a meeting with you.

It's learning, contents

- Lecture plan
- All lectures
- Exercises (previous exams)
- Info mails are generated from the participants list on It's learning, have a look in your «stud» mail box regularly

Lecture plan and exam date

TTT 4234-Space Technology I Autumn 2015

Venue: Auditorium **EL6**, Campus Gløshaugen

Hours:

T0: 08:15-09:00

T1: 09:15-10:00

T2: 10:15-11:00

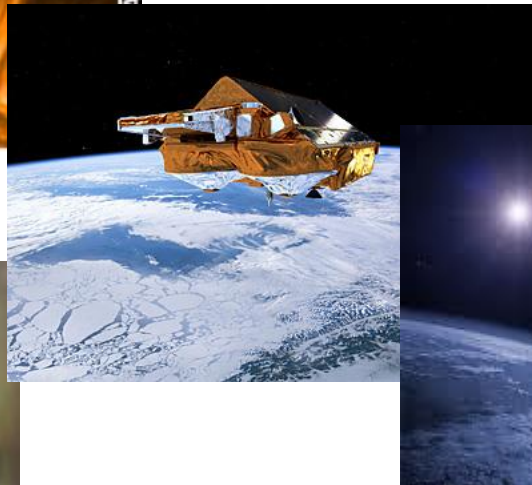
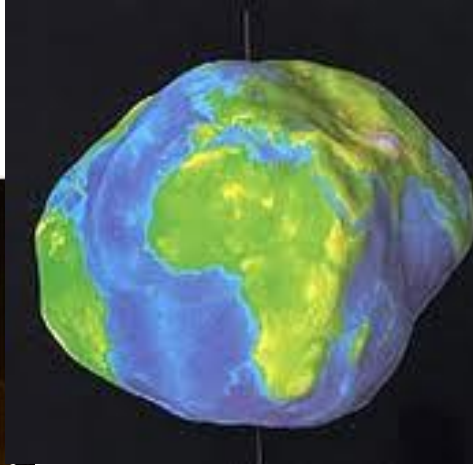
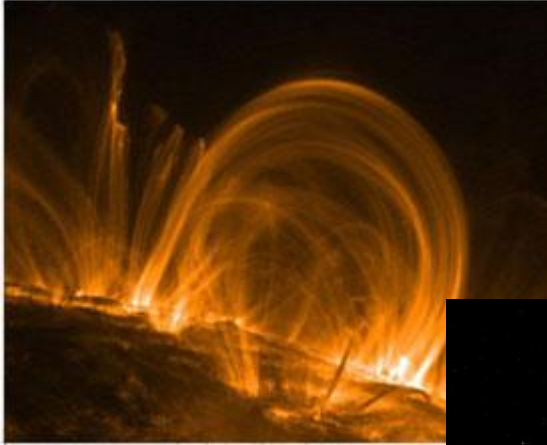
T3: 11:15-12:00

Date	Lecturer	Topic	Schedule
25.08	Vendela Paxal	Introduction	T1
	Roger Birkeland	Space environment: influence on satellites in orbit	T2
		Presentation of the student satellite project, NUTS	T3
01.09	Vendela Paxal	Satellite orbits: orbit types, mechanics in space, reference systems, perturbations	T1
			T2
08.09	Arve Jørgensen	Man in Space	T1
	Petter Eviu Skanke	Space tech II at Andøya/International Space University ++	T2
			T3
15.09	Vendela Paxal	Earth observation and navigation	T0
	Alexander Biebricher	The atmosphere	T1
			T2
			T3
22.09	Hossein Nahavandchi	Earth monitoring satellites: observing earth's size and shape, gravity field and earth's deformation in time. Different satellite systems, data types, applications.	T1
			T2
			T3
29.09	Vendela Paxal	Norwegian Space Industry	T1
		Indra Navia - Satellite landing systems for aircrafts	T2
	Grunde Joheim	Kongsberg - Norspace	T3
06.10	Knut Fossum	Space safety	T1
	Ann-Iren Kittang	Closed Regenerative Life Support Systems	T2
13.10	Vendela Paxal	Satellite platforms	T1
			T2
			T3
20.10	Liz Helena Froes Coelho	Microgravity	T1
			T2
27.10	Odd Gutteberg	Space transport: overview of conventional methods for satellite launch	T1
			T2
03.11	Vendela Paxal	Satellite communication	T1
			T2
			T3
10.11	Vendela Paxal	Polar light	T1
			T2
17.11	Vendela Paxal	Walkthrough of exercises	T1
			T2
			T3

Written exam 1st of Dec. 9:00-13:00

Space Tech I

TTT4234



Curriculum

- Main topics in all lectures on *It's learning*.
- The International Handbook of Space Technology -
<http://link.springer.com/book/10.1007%2F978-3-642-41101-4>
- All chapters except 2.6 in Compendium: Microgravity.
Available on It's learning.
- Exercises

Exercises

- Exercises are available on It's learning.
- Exercises/examples are often integrated in the lectures.
- Exercise session on the 17th of November, please meet prepared.
- Exams from previous years are available on It's learning, these are for self-study.

Space Tech II, spring 2017

- Main part is a student rocket launch from Andøya Rocket Range, usually the third week of June
- A mandatory seminar is given as a preparation to Andøya in February/March
- Portefolio evaluation (Essay, Home exercise, Report from Andøya)
- Number of students required; between 8 and 24. If too many students apply => selected by “first come, first serve”



Space Tech II

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