

Division of Electrical, Information and Communication Engineering	Research field	Spacecraft dynamics	Lab. ID EI07
Laboratory web site	http://spd.w3.kanazawa-u.ac.jp/wp/		
Research subjects			
Satellites orbiting the earth and probes sent to other planets are called "spacecrafts". In order to complete its mission, a spacecraft is controlled to point in the direction of its target. This is called attitude control, and its motion is governed by attitude dynamics. In order to control the attitude, measurement of its attitude is also important, and since humans cannot measure it directly, the attitude should appropriately be estimated by combining various sensor information. In this laboratory, we study on attitude dynamics, attitude estimation, and attitude control.			
Master/Doctor course: Education policy, curriculum, typical activity in the laboratory			
Graduate students in the Master's and Doctoral courses will have weekly research meetings with their supervisors to report on progress, discuss, and confirm issues. In addition, we aim to introduce relevant English literature twice a semester. Through these meetings, students will acquire new knowledge and the ability to discuss. In addition, in-lab seminars will be held to learn know-how and skills useful for research activities. At the end of the course, students in the Master's course are expected to be able to come up with solutions to given problems by themselves, and students in the Doctoral course are expected to be able to find and solve problems by themselves.			
Daily life in the laboratory, etc.			
<ul style="list-style-type: none">- High-spec computers and computing software are provided as common facilities and can be used freely.- The laboratory will be equipped with electronic tools, measuring instruments, 3D printers, and other equipment necessary for constructing experimental devices.- Depending on your research theme, your own equipment and software will be installed in the actual spacecraft.			
Message or comments by the laboratory faculty staffs			
The students and the staffs in the laboratory are cooperating with each other to create how to manage the lab and how to live in the lab. Any proposals from students are welcome. On the other hand, joint research and projects with other universities and the Japan Aerospace Exploration Agency (JAXA) are already under progress, such as the development of the Kanazawa University satellite, smaller CubeSats, planetary observation and attitude motion analysis using large balloons flying in the stratosphere, etc. If you wish, you can actually participate in the development work at JAXA.			
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