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| Division of Mechanical Science and Engineering | Research field | Applied Mathematical Analysis | Lab. ID |
| | | | MS01 |
| Laboratory web site | http://www.ms.t.kanazawa-u.ac.jp/~maths/index.htm | | |
| Research subjects | | | |
| <p>In this laboratory, we research for pure Mathematics (mathematical physics, partial differential equation). The research theme in master's course is decided in consideration of the applications to the mechanical field. For instance, the students can choose the theme such as analysis of quantum dynamical systems, variational theory and so on. In doctor's course, they can learn more specific contents such as mathematical study of many electron systems, supersymmetry and its application to condensed matter physics, Sobolev type inequality, nonlinear elliptic partial differential equation, and so on.</p> | | | |
| Master/Doctor course: Education policy, curriculum, typical activity in the laboratory | | | |
| <p>The research fields of our laboratory consist of "Applied Mathematical Analysis" and "Applied Mathematical Structures". In master's course, the students give a seminar with advising teachers about twice a week. Also, they give a talk for explaining the progress of their research in front of all members in our laboratory. In doctor's course, the students have seminars with their advising teachers individually. Doctor's students in the working member of society have seminars with their advisors in the weekends mainly.</p> | | | |
| Daily life in the laboratory, etc. | | | |
| <p>Each student can use one's own computer. We manage computers in our laboratory in which Mathematica and Maple has been installed, and it is available to apply them for numerical computations or simulations. We recommend especially for master's students to come to the laboratory in the morning and live a regular life. Basically we do not hold the mechanical experiments, and the students have a enough time in this sense. We strongly wish you to use this enough time meaningfully and to spend a fruitful research life.</p> | | | |
| Message or comments by the laboratory faculty staffs | | | |
| <p>First, the students learn the basical knowledge of pure mathematics. We advise the students to think of mathematics by using their own brains. Sometimes it would be not easy but we hope the students to feel the joy or accomplishment after their persevering efforts were finally rewarded. The place of employment after the graduation is wide-ranging. The companies concerning mechanics will be chosen mostly but some students have choices to find employment related to computer systems. It would be also considerable to proceed to a graduate school in the mathematical course.</p> | | | |
| Recent Master theses in these 3 years (+ more if appropriate) | | | |
| year.month | Thesis title (including English translation of Japanese thesis title) | | |
| 2017.3 | On a shared system of the electronic chart using the digital signature | | |
| 2014.3 | User registration system of bulletin board with traceability and anonymity | | |
| 2014.3 | Anonymous authentication system with a limit of access number | | |
| 2013.3 | Numerical analysis of partial differential equations - scaling function and spectrum method - | | |
| 2013.3 | Group authentication system using a secret sharing scheme and its applications | | |
| Recent Doctoral theses in these 3 years (+ more if appropriate) | | | |
| year.month | Thesis title (including English translation of Japanese thesis title) | | |
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| Laboratory mail address | Hidemitsu Wadade <wadade *at* se.kanazawa-u.ac.jp> | | |