

# Workshop on CLASS and MontePython

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We organised a workshop on “CLASS and MontePython” (October 27-31, 2014), where participants can learn how to use the latest cosmological linear Boltzmann code “CLASS” and the Markov Chain Monte Carlo wrapper “MontePython,” via lecturers and intensive hands-on exercises. The lecturers were the authors of the codes: Drs. Julien Lesgourgues, Benjamin Audren, and Thomas Tram. The linear Boltzmann code and the Markov Chain Monte Carlo code are indispensable tools in the research of modern cosmology, as the former is necessary to make theoretical predictions, and the latter is to compare the predictions with the data. However, developing these tools from scratch is redundant, and simply downloading and understanding the existing codes written by someone

else is painful and takes an enormous amount of effort. This is why we invited the authors of the latest, user-friendly codes such as CLASS and MontePython, in order to provide students and junior researchers with one-and-only opportunities to master these codes. We had 42 participants from institutions all over Japan. The participants were enthusiastic and eager to learn, asking many questions and working hard on the exercises provided by the lecturers. While the original program for each day was supposed to end at 16:30, many participants stayed in the lecture hall until they were kicked out at 18:00. We would like to thank the participants for their enthusiasm, as well as the lecturers for their hard work in preparing for such a wonderful program. The

lecturers were completely exhausted by the end of the workshop, but they were thoroughly impressed by the enthusiasm of the participants. Overall, the workshop was a great success, making a large impact on students and junior researchers working on cosmology in Japan. However, there is one thing that we must improve: we were disappointed to see that less than 10% of the participants were female. We used mailing lists such as tennet and rironkon to advertise this workshop broadly, but somehow we failed to encourage the participation of female students and scientists. We must work to more actively encourage the participation of females. We would like to thank the Kavli IPMU and the staff for generous support, which made this workshop possible.

