## Short stay in Germany and Italy

Faculty of Science, Department of Physics, D1, Kota Katsumi

I visited Germany and Italy for doing research collaboration, visiting labs and attending an international conference from June 3<sup>rd</sup> to July 1<sup>st</sup>.

First, I participated in the research collaboration with Prof. Michael Gensch's group at Helmholtz-Zentrum Dresden-Rossendorf at Dresden. We performed intense terahertz pulse-transmission measurements on cuprate superconductors to observe third harmonic generation using the superradiant terahertz emission source.

Next, I visited 3 labs in Germany; Prof. Andrea Cavalleri's group at Max Planck MPSD in Hamburg, Prof. Paul H. M. van Loosdrecht's group at University of Cologne QCMS in Cologne and Prof. Stefan Kaiser's group at Max Planck in Stuttgart. I saw experimental facilities and listened to many talks about their researches.

Then, I attended the international conference on Low-Energy Electrodynamics in Solids (LEES) to give a presentation about my research. The discussion with many top researchers was useful for me.

I would like to thank GRASP2018 for helping me go abroad. I would also be thankful to Prof. Shimano to give me this opportunity to participate in the research collaboration. Finally, I would like to thank all the members who hosted me in Germany.



Fig. The beautiful cityscape of Dresden.