

In mid-September 2015 I had the opportunity to take part to the IPP Summer University for Plasma Physics and Fusion Research, held in Garching. The summer school focuses on sharing basic knowledge and breakthroughs about the main aspects of plasma physics with an emphasis on nuclear fusion.

The course consisted of a very compact time schedule with two different lectures during the morning and, on average, a further three in the afternoon. Almost all classes were organized with coffee break once the presentation had finished. This allowed the opportunity to promote an exchange of views among the audience, largely made up by students attending their Master's Degree, and the lecturers, who proved really open to discussion.

Lectures covered the main topics of thermonuclear fusion, starting from the basics of plasma physics and the magneto-hydrodynamic description, and leading to the description of the most promising configurations (Tokamak and Stellarator) with their composition, function principles, and diagnostics. The schedule was however meant to provide a spectrum of knowledge much broader than that foreseen by my engineering academic studies; presentations focusing on astrophysical plasmas, the safety and environmental aspect of fusion, and the inertial approach really provided a new perspective on the topic. A visit to ASDEX Upgrade Tokamak, one of the research centre experiments, gave the opportunity to face the real size of the efforts made to promote plasma studies. It was however a shame to miss the opportunity to watch a live shot due to the scheduled maintenance.

Other than studying, the Summer University was again very interesting for the outdoor and indoor provided activities, starting from the very first day when a deep immersion into Bavarian gastronomical customs and tradition was offered in the local canteen. This was nothing compared to Thursday however! The guided tour inside the “Deutsches Museum” surpassed all expectations and was surprisingly thrilling, but the apex was reached during the dinner offered in a traditional “beerhaus”. The more Maß (the traditional 1 liter beer glass) were ordered the easier the people came into contact, overcoming any invisible barrier imposed either by their own culture *forma mentis* or the age difference. Believe me, I think I will never again play an Italian card game with a world-renowned physicist who really went into panic when his turn to play arrived. Dejected from defeat he exclaimed that the road to achieve fusion is a long and hard one, but still easier than trying to beat a well-trained team of Italian gamblers!!

I would like to thank FuseNet for having funded my participation to the summer school. This experience definitely gave me the opportunity to come into closer contact with other brilliant and enthusiastic colleagues, further enhancing my motivation and ambition in having joined the plasma physics research world.

