

**Seminar**

## **Flat focusing mirrors: Beam focusing in reflection without optical axis**

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**Date:** **Tuesday, 28.04.2015**

**Time:** **13:00 – 14:00**

**Location:** **Lecture Hall P8.409, Paderborn**

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## Abstract

## Flat focusing mirrors: Beam focusing in reflection without optical axis

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Recently, ultra thin lenses are realized by many engineered metasurface which contribute the desired wave front by varying their local geometries. However, the symmetric variation of structures, unavoidable, bring an optical axis. In this talk, the new designed physics of flat focusing devices is introduced and, importantly, they focus without any optical axes. The idea of our flat focusing mirrors were applied for different configurations such as multilayer structures and subwavelength gratings. The most significant focusing performance is that our optimized multilayer structure can obtain near field focusing in reflection with focal length up to 150 microns experimentally.