Optical Phenomena in Everyday Life

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The observation of optical phenomena in our everyday life is self-evident. This is the reason why optical phenomena in our environment often do not attract our attention and are excluded from our conscious perception. Furthermore, we are not continuously looking for unusual and usual optical phenomena in our environment. Often we recognize only objects which are in our interest, and, thus many objects in our field of view associated with optical phenomena are not realized. This course should contribute to sensitize the course members for optical phenomena in nature and in our everyday life and to understand the physics behind. For this, besides the underlying fundamentals of optics, the human perception and signal processing will be discussed. For a practical approach, examples for optical phenomena in nature and in everyday life including visual illusions should be demonstrated.