
Event cameras, such as the Dynamic Vision Sensor (DVS), are biologically inspired sensors that present a new paradigm on the way that visual information is acquired and processed. They offer several advantages over traditional video cameras, namely a very high dynamic range, no motion blur, a latency in the order of microseconds and the suppression of redundant data (i.e., lower bandwidth). In this talk, I will introduce these revolutionary visual sensors and the applications that they have to solve challenging robotics problems that are inaccessible to traditional cameras. In particular, I will present applications in motion and depth estimation in high speed and high dynamic range scenarios.