

## **CMOS Pixel Sensors for particle tracking and vertexing: Achievements and perspectives**

*Marc Winter  
IPHC Straßbourg, France*

CMOS Pixel Sensors (CPS) exploit the features of CMOS industry to achieve highly granular and thin sensors with integrated front-end electronics. The concept is being developed since the late nineties and benefits from the steady evolution of industrial ASIC and imager industry.

The talk will overview intrinsic features of CPS, highlighting the technology potential. It will next discuss pros and cons of various charge collection system and readout designs. The talk will then summarise achieved detection performances of existing devices manufactured in different imaging processes. Its last part will provide an outlook mentioning requirements of future devices using CPS.