



# Special Colloquium Announcement

of the Collaborative Research Centre 951

“Hybrid Inorganic/Organic Systems for Opto-Electronics”

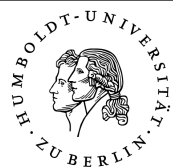
## Sébastien Pecqueur

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## Organic Semiconductors: Smart Materials for an Organic Intelligence

Time: Thursday, May 09, 2019, **16:00 c.t.**

Place: IRIS Adlershof, Zum Großen Windkanal 6,  
Room 007 (ground floor).



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# Organic Semiconductors: Smart Materials for an Organic Intelligence

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Now that organic semiconductors have just shown the competitiveness of their unique properties at the application level, rules to build electronics might change soon towards fundamentally different directions. At dawn of Moore's law, our concepts for sensing/computing/storing information are shaken up to realize new technologies, from which some are simply inspired by our own way to feel/think/memorize. In this non-Von-Neumann future, where electronics looks like us to perform recognition tasks very intuitive for us but computationally very expensive, let's question ourselves on how the new "sensor-transistor-memory" building-block will look like, but more importantly, with what should it be made of. In this presentation, we are going to see how organic semiconductors gather all the assets to satisfy the new figure of merits: After a brief introduction of machine-learning terms and a review of the current state-of-the-art of organic electronics for neuromorphic technologies, we are going to highlight some unconventional processes, material properties and molecularly-specific peculiarities which have been perceived for so long as drawbacks in electronic standards, but might unlock soon the necessary features for biomimetic electronics.