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Département de physique
de la matière quantique

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Auditoire A, École de Physique 24
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Three-dimensional nanoscale images of INTELLIGENCE

Par
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Natural and artificial intelligence are defined by wiring diagrams for circuits implemented using proteins and silicon respectively. Remarkably, both biology and silicon chip fabrication are more advanced in their capacity to define the platforms for intelligence than is the technology for imaging the outcomes. Conventional high-resolution microscopy for imaging the interior of three-dimensional objects typically entails destructive sample preparation followed by electron microscopy of resulting surfaces or sections. Here we describe X-ray ptychography, a mixed real space/reciprocal space („wavelet“) technique, which is non-destructive and provides three-dimensional images at steadily improving resolution, which earlier this year reached 15 nanometers. We show applications to integrated circuit inspection, and give perspective concerning applications to brain science.

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Le colloque sera suivi d'un apéritif dans le hall de l'École de

Physique Il est conseillé d'utiliser le parking public du Bd d'Yvoy