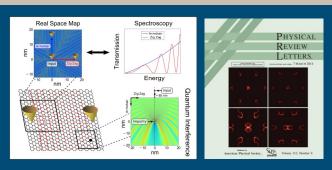


# CNG NEWSLETTER

**April**, 2014

## NEWS OF THE MONTH



(Left) STEM Dual Probe measurements on graphene (Right) Cover page of Physical Review Letters, 7 March 14

## Conductance mapping of graphene using a dual-probe STM

Mikkel Settnes, a PhD student at CNG, and co-workers from CNG have theoretically investigated multiprobe STM setups at quantum coherent length scales. In their very recent paper in *Physical Review Letters* - this issue features one of their figures as the cover image - Settnes et al. calculate the conductance between the two probes, separated by between 10 and 30 nm. The conductance signal yields much more information than what can be extracted by a standard single probe STM experiment. In the figure above momentum space conductance maps are shown: these images can be used to extract information of the various scattering processes affecting the mobility of charge carriers in graphene. See arxiv.org/abs/1401.8156.

## OTHER NEWS



EliteForsk award to Mads Brandbyge Assoc. Prof. Mads Brandbyge from DTU Nanotech received the EliteForsk Award of DKK 1.2 million in Feb 2014. This Award is one of the significant markers of quality that younger researchers can achieve in Denmark.

Read more <u>here</u>.

### **EVENTS**

#### **New meeting series - CNG JOURNAL CLUB**

CNG is starting up yet another meeting series — a Journal Club to help especially PhD student and Postdocs keep track with the rapidly increasing amount of graphene literature. The first Journal Club was held on March 28 2014, where 8 PhD students presented different papers on graphene.

#### **Annual meeting with DNRF**

On April 8 2014, CNG will host the Annual Review meeting with the Danish National Research Foundation. All CNG people will participate and the meeting will include i.a. presentations on current research as well as discussions with the PhD students.

#### Inaguration lecture by Peter Bøggild

On April 11, 2014 Prof. Peter Bøggild will give his inaguration lecture entitled: "2D or not 2D... A question of graphene's role in future technology".

#### Big CNG delegation at Graphene 2014

The 4th edition of the largest European event in graphene, <u>Graphene 2014</u>, will be held in Toulouse May 6-9. A very big delegation from CNG (around 24 people) will be present at the meeting. Center leader Prof. A. Jauho will give 2 invited lectures and PhD student M. Settnes and Postdoc D. Stradi will also give lectures at the conference.



CNG Journal Club, DTU Nanotech, March 28 2014

## UPCOMING LECTURES - By CNG faculty

Professor N. Asger Mortensen, DTU Photonics, gives an invited talk at <u>SPIE Photonics Europe</u>, Brussels, Belgium, 14-17 April 2014

## **NEW PUBLICATION**



Pattern recognition approach to quantify the atomic structure of graphene
Authors: J. Kling, J. S. Vestergaard, A. B. Dahl, N. Stenger, T. J. Booth, P. Bøggild, R. Larsen, J. B. Wagner, T. W. Hansen
Carbon (2014)

Read more at WWW.CNG.DTU.DK