



January 2015



UNIVERSITÀ DEGLI STUDI  
DI MODENA E REGGIO EMILIA

## RON NAAMAN

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### Charge transport through DNA: from self assembled monolayers to biosensor

**Thursday 15 January** Classroom I3.1 (ex 8) third floor via Campi 183

9 – 11 **How can we learn about damage to DNA?**

DNA- It is really special

Monolayers of DNA

The Low Electron Energy Transmission spectroscopy

Mechanism for damage by low energy electrons Based dependent damage

11 – 13 Discussion

**Tuesday 20 January** Classroom I02, (ex PT1) ground floor via Campi 183

9 – 11 **What can we learn on reactions in crowded environment?**

The self-assembled monolayers (SAM)

Scattering from SAM

Reactions of SAM

Reactions in SAM of DNA, what is special about it?

11 – 13 Discussion

**Wednesday 21 January** Classroom I02, (ex PT1) ground floor via Campi 183

9 – 11 **The electron spin- can it affect biology?**

Spin and chiral molecules

How we measure the importance of the spin in charge transfer processes?

The role of spin in photosynthesis and in electron transfer through

peptides. How it can be explained?

11 – 13 Discussion

**Thursday 22 January** Classroom I02, (ex PT1) ground floor via Campi 183

9 – 11 **Hybrid molecular-semiconductor bio-sensor operating in vivo environment.**

11 – 13 Discussion.

Students, researchers and teachers are kindly invited

Il Direttore della Scuola di Dottorato in Scienze  
e Tecnologie dei Prodotti per la Salute  
*Prof. Annalisa Tait*

Il Direttore del Dipartimento  
di Scienze della Vita  
*Prof. Daniela Quaglino*