

**Wiener Biometrische Sektion  
der Internationalen Biometrischen Gesellschaft  
Region Österreich – Schweiz**

<http://www.meduniwien.ac.at/wbs/>

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Einladung zum

**BIOMETRISCHEN KOLLOQUIUM**

Am **Mittwoch, 8. Mai 2013** um **16:30 Uhr** (s.t.)

in der Informatik-Bibliothek (Ebene 3, Raum 88.03.806) des  
Zentrums für Medizinische Statistik, Informatik und Intelligente Systeme (CeMSIIS)  
der Medizinischen Universität Wien, Spitalgasse 23, 1090 Wien  
(Plan siehe <http://www.muw.ac.at/cemsis/allgemeines/anschrift/>)

Vortragender:

**CAROLINE UHLER**

Institute of Science and Technology Austria

**CHROMOSOME PACKING IN CELL NUCLEUS**

Wir freuen uns auf zahlreichen Besuch.

Gerhard Svolba  
Präsident

Franz König  
Sekretär

# CHROMOSOME PACKING IN CELL NUCLEUS

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Abstract:

During most of the cell cycle each chromosome occupies a roughly ellipsoidal domain called a chromosome territory. Chromosome territories can overlap and their radial and relative positions are non-random and similar among similar cell types. A chromosome arrangement can be viewed as a minimal overlap configuration of ellipsoids of various sizes and shapes inside an ellipsoidal container, the cell nucleus. We describe a bilevel optimization formulation to find minimal overlap configurations of ellipsoids and compare these optimal packings to chromosome packings in order to understand how much of the non-random positioning of chromosomes can be explained solely by the geometric constraints.