

## TopoClub, Paris 20-21 of February 2025.

Ecole Normale Supérieure, Amphi Dussane, 35 rue d'Ulm

### February 20<sup>th</sup>

#### 2.00 – 3.30 pm **Session 1: Chromatin and DNA Topology**

2.00 – 2.20 pm Olivier Espéli: *Nucleoid disruption by a bacteriophage Protein*

2.20 – 2.40 pm Stephanie Bury-Moné: *Dynamics of Streptomyces genome architecture and genomic island expression*

2.40 – 3.00 pm Michella KHOURY DAMAA: *Nuclear dynamics during multiciliated cell differentiation*

3.00 – 3.20 pm Joanna Timmins: *HU plays a key role in nucleoid organization and compaction in the radiation-resistant bacterium Deinococcus radiodurans*

3.20 – 4 pm Coffee Break

#### 4 – 5.00 pm **Session 2: Chromosome Topology in Transcriptional Regulation**

4.00 – 4.20 pm Ivan Junier: *Quantitative insights into topoisomerase activity during gene transcription*

4.20 – 4.40 pm Virginia Lioy: *Bacterial chromatin remodeling associated with transcription-induced domains at pathogenicity Islands.*

4.40 – 5.00 pm Céline Borde: *DNA topoisomerase I C-terminal domain is crucial for the pathogeny and stress response of adherent Invasive E. coli*

8 pm Social diner at “ *L’escarmouche*”, 40 Rue de la Montagne Ste Geneviève, 75005 Paris

### February 21<sup>st</sup>

#### 9.30 – 10.30 am **Session 3: Molecular mechanisms of topological simplification**

9.30 - 9.50 am Marlène Vayssières: *Structural basis of DNA crossover capture by Escherichia coli DNA gyrase*

9.50 – 10.10 am Iris Veyrier: *Replicon dynamics during the cell cycle in Escherichia coli*

10.10 – 10.30 am James Provan: *The first structural observations of an XerCD-dif DNA recombinase complex*

10.30 – 11.00 am Coffee Break

**11.00 – 12.00 am      Session 4: Topoisomerases Structure and Mechanism of Activity**

11.00 – 11.20 am      Claudine Mayer: *Specificities of mycobacterial DNA gyrases using orthology approaches*

11.20 – 11.40 am      Yaelle Wormser: *Validation of Corynebacterium glutamicum as a surrogate for the discovery of new anti-mycobacterial compounds through the study of a well-established antibacterial target: DNA gyrase*

11.40 – 12.00 am      Patrick Forterre: *La reverse gyrase était-elle présente chez LUCA et/ou chez le dernier ancêtre commun des Asgard*