

## NANO COLLOQUIA 2025 - S3 SEMINAR

### Order in Disorder: Functional Roles in Materials and Proteins

Thursday February 27, 2025 – 14:30

ON-SITE - S3 Seminar Room, Third Floor, Physics Building

ONLINE - <https://tinyurl.com/NanoColloquia>

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#### Abstract

What is disorder in material science? What is an intrinsically disordered protein? Disorder is more than simply a lack of order and several studies tried to define it<sup>1-4</sup>: from material sciences to biology. However, the concept of disorder is not only related to structural factors, but also to the functional properties of the systems<sup>5,6</sup>. The understanding of disorder in of amorphous materials widely employed in industrial applications and daily life is the key to control their mechanical, electrical, and chemical properties<sup>7,8</sup>. Rather, it is far from being understood. The same applies for proteins, where it is now evident that some functionalities involved in relevant biological processes are related to their intrinsic disordered regions<sup>9</sup>.

#### References

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