

**HDR**

**Jeudi 20 Décembre 2018 à 14h**

*Salle des séminaires*

*Institut de biologie structurale - 71 avenue des Martyrs CS 10090 38044 Grenoble Cedex 9 - T.+33 (0)4 57 42 85 00*

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Groupe Infection virale et cancer

## **The emerging role of mass spectrometry in structural biology**

Biological mass spectrometry (MS) is an important approach to assess the mass of biomolecules with high accuracy, sensitivity and speed of analysis. It has wide applications and it is of fundamental importance to answer many diverse biological questions. In my presentation I briefly introduce the four types of biological MS I used during my scientific career. I illustrate my work during my PhD studies: "Study of the epidermal growth factor receptor using bottom-up MS-based proteomics" and "Identification and characterisation of the oncosuppressor p140Cap by proteomics". As postdoctoral fellow (2006-2011) I worked in England and in Switzerland to investigate intact protein complexes by native MS. Finally, I illustrate my past, current and future MS investigations I carry out at the Institute of Structural Biology in Grenoble. To conclude, MS represents an emerging tool in structural biology because it provides novel insights on the two dimensional map of macromolecular assemblies with high sensitivity, complementing traditional structural biology approaches.