



**Theoretical and Physical Chemistry Institute  
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**Vass. Constantinou 48, Athens**

**LECTURE**

**“Phase Transitions in Disordered Systems”**

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United Kingdom**

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**Seminar room, ground floor, NHRF**

# Phase Transitions in Disordered Systems

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In condensed-matter physics, the behavior of a strongly disordered system cannot be inferred from its clean, homogeneous counterpart. In fact, disordered systems are prototypical examples of complex entities in many aspects, mainly in the rough free-energy landscape profile. In this talk, I will present new results, obtained using advanced methods of theoretical and computational statistical mechanics, that settle down fundamental open questions in the theory of critical phenomena of disordered systems.

- [1] N.G. Fytas and V. Martin-Mayor, Phys. Rev. Lett. **110**, 227201 (2013).
- [2] N.G. Fytas, V. Martin-Mayor, M. Picco and N. Surlas, Phys. Rev. Lett. **116**, 227201 (2016).
- [3] N.G. Fytas, V. Martin-Mayor, G. Parisi, M. Picco and N. Surlas, Phys. Rev. Lett. **122**, 240603 (2019).