C10: The Structure and Dynamics of Condensed Matter

Activity Report for 2018 IUPAP C&CC Meeting April 17, 2018

(Submitted by Laura H Greene, Chair C-10)

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Activity report:

1. The C 10 YSP 2018 award ceremony was held at the 2018 March meeting of the American Physical Society (APS) in Los Angeles, CA, USA, March 5, 2018. The Prize winner was **Dr Michele Ceriotti** from the Institute of Materials, École Polytechnique, Switzerland with citation: "For his work on the development of novel and original algorithms to extend the scope and accuracy of molecular dynamics simulations, and to rationalize and predict the structure-property relations in complex materials." His presented invited talk was outstanding.



C10 Chair Greene presenting the C10 YSP Certificate and Medal to Michele Ceriotti at the 2018 APS March Meeting

- 2. We will be publically announcing on the IUPAP web site, and other sites, the C 10 2019 YSP to start the nomination process, which will go from 5/1 till 7/15/2019.
- 3. Given the diversity of fields in C 10, the commission members have rarely been able to meet face to face. The conference of "Materials and Mechanism of Superconductivity" is a C 10 sponsored conference, and the 12th conference (M2S 2018) will be held 19-24 August of this year in Beijing, China. The C10 Chair will be attending, as will some of the C10 commissioners. We will take this opportunity to meet at this conference and discuss C10 agenda items.
- 4. The US National Academy of Science, Engineering, and Medicine is presently doing a Decadal Survey of Materials Research that should be out this year. Greene, the C10 Chair is a co-chair of this Survey and when released, will notify the relevant IUPAP Commissions.
- 5. The C10 Commission will discuss a name change. From "Structure and Dynamics of Condensed Matter Physics" to "Quantum Materials." which is closer to what the Commission actually does. Note there are five Commissions that encompass condensed matter physics:

C 5: Low Temperature

C6: Biological

C 8: Semiconductors

C 9: Magnetism

C 10: Structure and Dynamics of Condensed Matter

We believe such a name change will more accurately reflect C 10 and will not impinge on the other condensed matter commissions. We will keep Council and other Commissions abreast of our discussions and progress.