

Possible subjects/questions on the EOS.

1. Are two-body forces reliable at the high density of the inner core of Neutron Stars or of mergers ? In particular, do we need to fit phase shifts beyond the inelastic threshold ?
 2. The same for three-body forces (this is essentially a rethoric question).
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3. And then, how reliable are the predicted EOS at high density ?
In addition, how large is the uncertainty on the microscopic methods ?
What about symmetry energy at high density ?
 4. How stringent is the constraint on the maximum mass ? Are the "observed" values firmly established ?
 5. Is the value of 2.16 solar mass already a theoretical challenge ?

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6. Is there a clear signature of the EOS in the merger events ?
 7. Is it possible to extract reliable informations on the EOS from the inspiraling stage of the mergers ?
 8. How to include thermal effects on the EOS, if necessary ? In particular for the mergers.
 9. Is there any evidence of quark matter or hyperons in the core of Neutron Stars or merger events ?
 10. If not, is this a theoretical challenge ?