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# Meeting Objectives

**IAEA Technical Meeting on Uncertainty Assessment  
and Benchmark Experiments for Atomic and  
Molecular Data for Fusion Applications  
19-21 December 2016, IAEA Headquarters, Vienna**

# Meeting Purpose and Topics

[...] to advance data-oriented research on atomic and molecular (A&M) processes and properties that are important for plasma applications.

- **Prioritization** of data needs for fusion applications.
- **Experimental benchmarks** of theoretical A&M data.
- **Target uncertainties** of A&M collision data for fusion applications.
- **Uncertainty quantification** methods for theoretical A&M data.
- **Network of A&M physicists** doing benchmark experiments and computations.

# Discussion Sessions

## Three discussion sessions

- Data priorities for Fusion applications.
- Benchmarks of theory and experiment.
- A&M experimentalists network.

## Questions to be addressed

- How can benchmarking measurements be organized taking into account the most recent developments in the experimental as well as theoretical areas?
- How can detailed measurements of reaction dynamics help to improve reliability of theoretical calculations?
- What kind of joint activities, joint proposals or other forms of networking can be encouraged?

# Outputs and outcomes

- **Meeting web page** including presentation materials.
- **Summary report**: Review of the discussion sessions.
- **Proposals** for specific measurements to set new benchmarks for prioritized data.
- **Plan of action** to carry out this benchmarking and the associated uncertainty assessment.
- **Reinvigorate experimental work** to support A&M databases for plasma applications.
- **Encourage UQ of theoretical data**, beyond just doing the best possible calculations for given resources.
- **See the development of an evaluated data library** for fusion and other plasma applications.

# Organizational Matters

- **We have a tight schedule** and very little slack. Please adhere to the 20-min window including question time.
- **Please let us have your presentation materials:** Email to [h.chung@iaea.org](mailto:h.chung@iaea.org) if <18MB; else use a memory stick or a suitable file sharing service.
- **The Bank in the C-building** (rotunda, first floor) is open until 15:00 each day.
- **We have a poster session and a reception** on Monday afternoon; posters will stay up.
- **We will do a group photo** on Tuesday afternoon.
- **Enjoy Vienna in the evenings.**



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*Thank you!*

