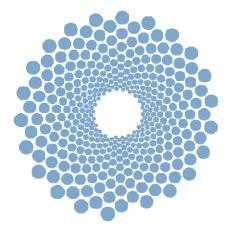
# Dynamical structure of asteroid belt and NEO provenance

lead: Camilla Colombo

- Are main belt asteroids important to NEO hazard or resources?
- Is the current Ganvik et al. NEO model good enough for the next 20 years?
- If not, what do we need to do to improve it?
- Why should we care about NEOs rather than VIs or PHO

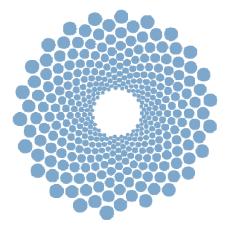




#### Science at Asteroids

lead: Detlef Koschny

- What types of missions are needed for science?
- What do we need to measure?
- What instruments are required?
- How much overlap is there between science, impact hazard, and ISRU?
- CubeSats vs. MicroSats vs. Discovey vs.???

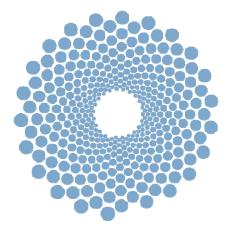




### **Legal Aspects**

lead: Detlef Koschny

- General International space law
- Legal aspects of impact deflection to deflect or not? – with what method? – what if it goes wrong?
- Legal aspects of asteroid mining does a company own the asteroid? The extracted resources? What about polluting the space environment?

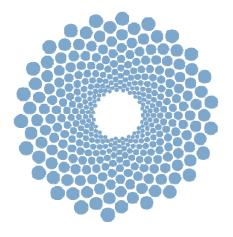




### Asteroid mining

lead: Robert Jedicke

- What types of missions are needed for asteroid mining?
- Does it make sense to think about ISRU before the impact hazard is solved?
- Is asteroid mining economically viable?
- Should ISRU be pursued even though it may have implications for the space environment?
- Are legal barriers going to be prohibitive?

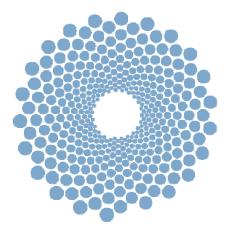




### **International Coordination**

lead: Detlef Koschny

- Is the current level of international coordination adequate?
- If not, how should it be augmented?
- How should future work be directed?
- MPC process





## 31st May

#### Asteroid deflection

lead: Camilla Colombo

- What types of missions are needed for asteroid deflection?
- How do we prepare for the multitude of options?
- What is the appropriate time frame for each option being erady given its application?
- Which physical properties are relevant and how do we measure them?
- Who should pay for deflection?
- How do we avoid future resonant encounters?
- Do we need to worry about misapplication of deflection techniques?



### **Science Communication**

lead: Andreas Burkert

- Does EPO provide benefits to scientists? to science?
- What are the problems and misperceptions? How do we correct them?
- How do we best convey the danger of an asteroid impact to the press in a way that we avoid miscommunication?
- Are we desensitizing the public to asteroid impacts because every close approach of a small object is in the press?
- Can we develop guidelines for reporting objects to the public? e.g. impact threat
- Should scientists ever write anything for the public?
- When should impact corridors be published?
- Do we need a color scale for flybys to give journalists an idea of how important would be to report on a flyby from a technical/scientific view? e.g. based on fly-by distance and size.
- From the journalist's perspective what is the point of reporting the flybys? Sciece or sensationalism?
- Are refereed scientific journals no longer the best way for scientists to publish research?
- · What about Mathematica Notebook or iPython/Jupyter?

