**Guiding Principles**

of

**TRA Matter**

(the Transdisciplinary Research Area "Building Blocks of Matter and Fundamental Interactions")

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**Vision**:
**The Transdisciplinary Research Area "Building Blocks of Matter and Fundamental Interactions" (TRA Matter) fosters open thinking and facilitates exchange and networks across conventional boundaries in exploration of the physical world. We inspire and train the next generation to excel in fundamental science and apply it to address global challenges.**

**Mission**:
To realize our vision, TRA Matter

- Provides a platform to support risky, idea-driven endeavours that bridge knowledge of nature at different time and length scales. The core of our mission is to bring together the diverse research and teaching cultures within the broad spectrum of natural sciences.
- Contributes to the evolution of university structures across the faculties by providing the perspective of natural science, by inspiring new hiring decisions, incubating collaborative projects, innovating joint teaching programs and promoting the perspective of young researchers.
- Promotes interactions of its members with researchers from disciplines beyond the natural sciences. We want to push the boundaries of traditional research alliances.
- Explores technological developments for research and application.
- Seeks interactions with society to explore the impact of fundamental science on our collective understanding of the world and the challenges we face.
- Grows our networks by partnering locally, nationally, and globally with other organizations and communities.

**Values & Culture:**
In striving to achieve our mission, we place high value on:

***Transdisciplinarity***

*Our understanding of science is transdisciplinary. Stemming from discipline-oriented science within the faculties, TRA Matter promotes multi-perspective and interdisciplinary research approaches. We value the diversity of research cultures that exist already within the natural sciences and its related fields, such as mathematics, computer science and the life-sciences. Striving for a shared understanding of differences and commonalities between research fields, their cultures, methodologies and languages will facilitate the discovery of new promising areas of investigation. True to our deep roots in evidence-based and quantitative research we seek links across faculties for forging new research paths. As scientists we appreciate our role in society and seek out interactions with institutions and the public, in order to engage in dialogues at the intersection of science and society.*

***Exploration***

Curiosity to pursue new answers and elucidate previously unexplained phenomena is at the heart of science. While scientific investigation often has an uncertain outcome, which may be especially true for interdisciplinary initiatives, we embrace the risks involved and value the experience gained from these challenging endeavors, because we recognize that multi-perspective approaches to complex problems can yield new and unanticipated solutions. We embrace the opportunities to acquire new skills and knowledge when venturing into new fields. We recognize that exploring new areas from unusual perspectives can increase the chance of serendipitous discovery. For these reasons we are committed to life-long learning beyond our already established areas of expertise.

***Networks***

We recognize that interdisciplinarity is a team effort. The communities and networks we build across faculties and disciplines are our most valuable asset. Developing common languages to work together productively across disciplines will be one of our most impactful achievements. Breaking down the cultural barriers between the sciences and humanities is a challenge we are addressing by joining forces with our colleagues from other TRAs across the faculties. Teaching the next generation how to establish connections with colleagues across communities is critical to achieve our vision of a future where scientists are both experts and globally networked generalists.