正文 / Main Text:

In current scientific frameworks, the field known as "materials science" typically focuses on the structural behavior of atoms or molecules, especially in relation to mechanical, thermal, or electrical properties. These investigations emphasize post-atomic behaviors—molecular arrangements, lattice structures, and intermolecular bonding—using atoms as given, foundational units.

However, in the view of **trend-structure theory**, what we call "materials" is only a mid-layer phenomenon in the broader hierarchical construction of the universe. The focus of this theory is not on atoms or molecules, but on **the pre-atomic trend structures**—the invisible frameworks that generate protons, neutrons, and ultimately atomic nuclei.

In this framework:

- **Atoms** are not the starting point. They are **secondary results** of deeper structural interactions between **quantum-level trend units**, which form protons and neutrons through a process of complex energy sealing.
- These deeper units, called **trend factors** (趋势因子), are dynamic, pre-material agents that embody directional potential—compressive or expansive. Their stable combinations form **quantum nodes** (量子), and through further structural entanglement, they give rise to nucleonic matter.

This leads to a **clear disciplinary divide**:

- **Traditional materials science** starts from atomic building blocks, manipulating molecular or crystalline arrangements to achieve desired macroscopic effects.
- **Trend-structure theory** starts from sub-nuclear causal structures, seeking to understand **how matter originates in the first place**, and how different levels of structural complexity **store and compress energy differently**.

Thus, the **"material" in materials science** is a post-nuclear phenomenon.
But in **trend-structure theory**, matter only becomes "material" after **an underlying structure of quantum convergence** has successfully locked into a stable energetic configuration.

This distinction is not just conceptual—it redefines **what "structure" means**:

- In materials science, structure is spatial and geometric.
- In trend theory, structure is **energetic and directional**—a manifestation of invisible tensions sealed within trend convergence.

Therefore, from the trend perspective, materials science **does not and cannot** answer questions like:

- Where does energy originate within mass?
- Why do heavier atomic nuclei store more compressed energy?
- Why does matter behave differently even when composed of the same number of subatomic units?

These are **pre-material** questions that require **a pre-atomic, structural explanation**.

Only by introducing the concept of **trend layers**—that is, layering from trend factor → quantum → nucleon → atom → molecule → material—can we see that current materials

science operates only on the outermost observable shell of a much deeper energetic architecture.