

**The Effective Construction on Elastic Metamaterials**

**Hongjie LI**

**Yau Mathematical Sciences Center, Tsinghua University, P. R. China**

**Email: [hongjie\\_li@yeah.net](mailto:hongjie_li@yeah.net)**

In this talk, different kinds of structures are explored to effectively achieve the negative elastic metamaterials. First, the structure involving the bubbles embedded within the soft elastic materials will be discussed, offering an effective means to achieve the negative bulk modulus. Then the configuration incorporating hard inclusions embedded in the soft elastic matrix shall be investigated, enabling the attainment of negative values in the mass density.