

数学与系统科学研究院

计算数学所学术报告

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报告题目:

**On the formation of blood pulse**

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报告时间: **2013年6月21日(周五)**

**下午 15:00**

报告地点: **科技综合楼三层 311**

**计算数学所报告厅**

## **Abstract:**

**Blood pulse diagnosis is an important tool In traditional Chinese medicine. In this work, we aimed to understand and evaluate the scientific base of pulse diagnosis from the viewpoint of wave propagation in arterial vessel tree. One dimensional model of blood flow is used to understand the formation of important characteristics of the blood pulse at the radial artery, such as the dicrotic wave. By taking into account the effect of vessel wall thickening, the pulse phase obtained in our simulation show consistent change with the pulse phase measured in hypertension patients. As our simulation shows, the local structural change of internal organs can also lead to significant change in pulse phase. These results suggest that (the change of) blood vessel structure can provide a bridge between disease and (the change of) blood pulse.**

**欢迎大家参加!**