Novel Approaches in Dependable Computing

◆ some buzz words: *immune inspired fault tolerance*, *immunotronics*, *self-healing*, *self-repair*, *autonomic computing*, *planetary computing*, *architectural reconfiguration*;

◆ Are these new approaches really relevant for dependable computing?

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Motivation

Background

Biological Inspired Computing

Opportunities & Challenges

Opportunities:

- ◆ What the new approaches promise that the existing approaches are not able to achieve?

  - ◆ trustworthiness, scalability, adaptability and cost;

- ◆ What is the current evidence that these can be achieved?

Challenges:

- ◆ What are the challenges that novel approaches face when applied to dependable systems?