



Theoretische Physik Ia

Rechenmethoden der Mechanik

Woche 6 (VL 20.11./21.11.)

CRC 1461 - Neurotronics

Bio-inspired Information Pathways

As a result of Billions of years of evolution, all living animals are extremely well adapted to inhabit their ecological niche. This implies species specific interaction with their immediate environment by assessing sensory cues and performing appropriate behavior. The information pathway in pattern recognition and cognitive tasks are of special interest as platform for reverse engineering. These features represent attractive guidelines for entirely new computing architectures. With a concerted effort of a multidisciplinary team from the fields of neuroscience, biology, psychology, physics, electrical engineering, material science, networks science and nonlinear dynamics, fundamental information pathways in selected nervous systems will be extensively studied with respect to their relevance as building blocks for novel, hardware-oriented computing.

Vorlesung 20.11. (Mi., 8:30 – 10:00)

1. Abschluss: Kapitel 1 & 2

- (Probe)klausuraufgaben

2. Tutorium 5

- Spickzettel anfertigen
- u.v.m.

Übungen finden wie gewohnt statt...

1. Skalare

2. Vektoren im kartesischen Raum

3. Skalarprodukt

4. Kreuzprodukt/Vektorprodukt

5. Levi-Civita-Symbol

6. Mehrfachprodukte

Aufgabe:

a. Textbuch wälzen

b. Glossar wichtiger Begriffe erstellen

c. Intuition schärfen

- **Visualisierung, Abbildungen**
- **Eselsbrücken**
- **Beispiele**

Fazit: keine VL im Hörsaal am 21.11.



Bis 27.11.!