



UNIVERSITÄT HEIDELBERG ZUKUNFT SEIT 1386

### **IWR COLLOQUIUM WINTER SEMESTER 2025/26**

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# When Al Performance Misleads: From Success in Papers to Failure in Practice

Despite impressive performance in publications, many AI models fail when deployed in real-world settings. A key reason is poor or misleading validation. This talk explores common pitfalls in validating AI systems, especially the misuse of performance metrics, and shows how they can create false confidence. Practical recommendations will be offered to guide more robust and trustworthy validation practices, aimed at supporting the safe and effective integration of AI into real-world workflows.



## November 6, 2025 • 16:15 • Mathematikon

Conference Room / 5th Floor • Im Neuenheimer Feld 205 • 69120 Heidelberg www.iwr.uni-heidelberg.de/en/iwr-colloquium

#### **HGS MathComp Mixer**

Prior to the IWR-Colloquium: Get-together for all members of the HGS MathComp 15:45 · Mathematikon · Common Room / 5th Floor