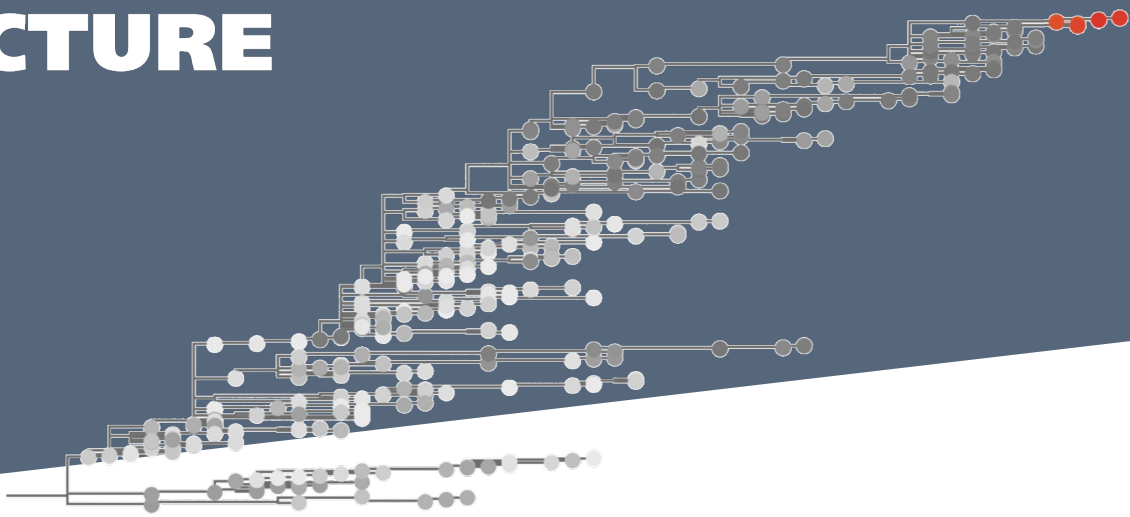


# MAX DELBRÜCK LECTURE



## Nonsel self: why cancer cells engage the immune system

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Cancer cells start as self, yet by the time they are detected they have often evolved mechanisms to evade the immune system. Which specific features immune selections acts on, and whether they are fundamental to cancer evolution is the subject of our research. We discuss two aspects where the production of nonself features is fundamental to cancer evolution: neoantigen creation through mutational processes and de-repression of nucleic acids derived from repetitive elements. We show how both species arise due to fundamental evolutionary tradeoffs which tell us about the essential role of the immune system in ensuring genome fidelity. Moreover, their understanding can help us better design emerging therapies such as anticancer vaccines.



Scan or click to join on Zoom

Wednesday, July 10, 2024, 17:00  
University of Cologne  
Institute for Biological Physics  
Seminar Room S0.03, Zülpicher Str. 77a

Hosted by M. Meijers & M. Lässig