

Fakultät für Naturwissenschaften das Institut für Chemie und das Institut für Physik

TUC
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laden ein

gemeinsam mit der Gesellschaft
Deutscher Chemiker
zum

Vortrag
von Herrn

**Prof. Dr. Pierre
Stallforth**

Leibniz Institute for Natural
Product Research and Infection
Biology

***Leibniz-HKI and
Friedrich Schiller
University - Jena***



„Exploring Natural Products in Space and Time: from Ancient Molecules to Microbial Arms Races“

am: 18. Juni 2026

um: 15:30 Uhr

WO: im Raum C10.013

Gäste sind herzlich willkommen!



TECHNISCHE UNIVERSITÄT
IN DER KULTURHAUPTSTADT EUROPAS
CHEMNITZ

Prof. Dr. Johannes Teichert, Tel.: 0371/ 531 33715 (Chemie) und Prof. Dr.
Olav Hellwig, Tel.: 0371 531-30521 (Physik)

Prof. Dr. Michael Sommer - Telefon: 0371 / 531 32507
E-Mail: michael.sommer@chemie.tu-chemnitz.de

Prof. Dr. Pierre
Stallforth

Leibniz Institute for Natural Product
Research and Infection Biology
**Leibniz-HKI and Friedrich
Schiller University - Jena**



Exploring Natural Products in Space and Time: from Ancient Molecules to Microbial Arms Races

Microbial natural products remain a critical source of therapeutic agents. These compounds are often shaped by intricate ecological interactions. Predator–prey dynamics between amoebae and bacteria represent particularly rich reservoirs of these secondary metabolites. Amoebae, as ubiquitous bacterivores, exert strong selective pressure, driving bacterial defenses against grazing and, in turn, amoebal counter-adaptations.^[1,2] Within this evolutionary arms race, we investigate the biosynthesis and diversification of amoebicidal natural products, including polymicrobial modifications that expand their chemical repertoire.^[3–5] Extending this perspective into the past, we exploit ancient bacterial DNA to identify and reconstruct biosynthetic genes, providing access to previously untapped natural product diversity.^[6,7]

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