**Heterocyclizations and Cross-Couplings Enabled by Stereocontrolled Alkene Functionalization**

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Our group develops methods that enable the efficient generation of chiral building blocks and heterocyclic scaffolds. The seminar will focus on our recent efforts to exploit N-O[1,2] and C-H bonds[3,4] as initiating units for stereocontrolled alkene functionalization processes. Methodological advances, mechanistic aspects and applications in total synthesis will be presented.



**References**

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3. C. Jing, W. Mao and J. F. Bower; *J. Am. Chem. Soc.* **2023**, *145*, 23918-23924.
4. F. Hong, T. P. Aldhous, P. D. Kemmitt and J. F. Bower; *Nat. Chem.* **2024**, *16*, 1125-1132.