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## **Multi-messenger astronomy in the era of the Zwicky Transient Facility**

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With the start of a wide-field optical photometric survey at the Zwicky Transient Facility (ZTF), a unique opportunity has begun to scan the northern sky for transients such as Core-Collapse Supernovae, Active Galactic Nuclei and Tidal Disruption Events. The scientific potential is achieved by combining a 47 sq. deg. camera that can perform a 3PI survey each night to a depth of 20.5 mag with the availability of multiple filters. Hence, ZTF has ideal features for multi-messenger astronomy. In this talk I will introduce the ZTF program and its major science goals, as well as highlighting the multi-messenger potential with the example of an online neutrino correlation search with IceCube.

**Author:** RAUCH, Ludwig (DESY)

**Presenter:** RAUCH, Ludwig (DESY)

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