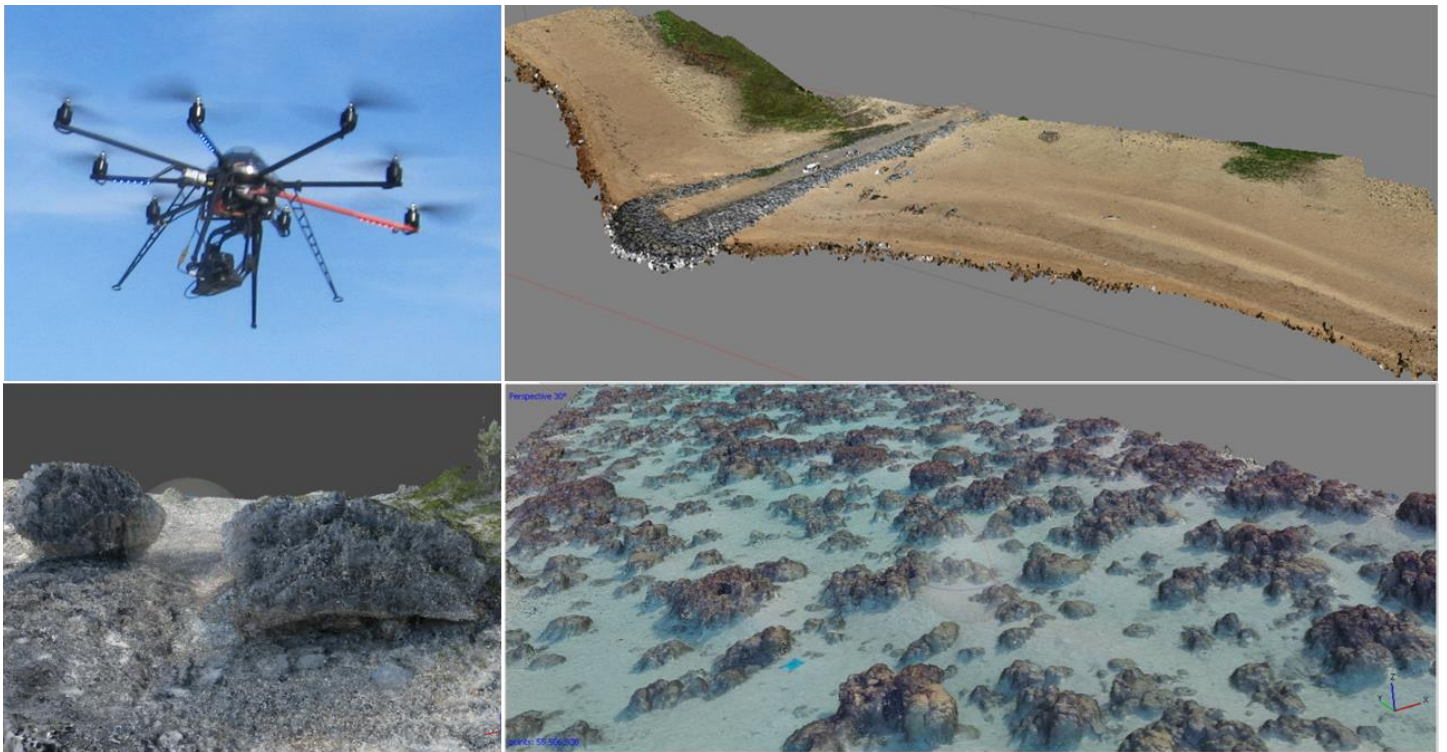


# Scientific survey using Unmanned Aircraft Systems and 3D reconstruction of coastal environments with the Structure from Motion method

Dr.-Ing. Elisa Casella



**January 25<sup>th</sup>, 2018**

Leibniz-Zentrum für Marine Tropenforschung (ZMT) GmbH  
Fahrenheitstraße 6, 28359 Bremen

**FRI 14**

09:30-10:30	Introduction and overview of the methodology
10:30-11:30	Planning a survey using a UAS: Regulations, study site, flight planning, ground control points and flight programming
11:45-12:30	Scientific applications

13:30-14:30	Introduction to the photogrammetric suite: Structure from Motion method
14:45-17:30	Hand-on experience with Agisoft Photoscan photogrammetric software

The UAS market is flourishing and the use of UAS is revolutionizing many fields, among which environmental studies and all the sciences where a small-scale aerial view can provide high-resolution information to study natural or human-induced processes. Together with UAS, the development of new-generation photogrammetric methods are building the base of a more efficient way to measure environmental changes.

The aim of this workshop is to provide an introductory course to coastal scientists willing to explore the potential of UAS in their studies and using them consciously. This workshop has also the aim of introducing the photogrammetric method through the Agisoft Photoscan suite. Participants will be able to measure 3D properties of objects in a given reference system using photos.

Who can attend? Scientists, Post Docs, PhD students, Master Students.

Maximum number of participants: 10

Requirements: Laptop