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## **Seminar über Microwave Physics and Atmospheric Physics**

**Referent/in:** Dr. Christof Schüpbach, armasuisse, Wissenschaft und Technologie, Thun

**Titel:** Passive Radar – seeing without being seen

Unlike conventional active radar, passive radar does not transmit any signal of its own but relies on signals of opportunity like e.g. radio or TV broadcasts to detect targets. This has a number of very important advantages such as lower cost, lower hardware complexity, constant illumination and, most importantly, complete electromagnetic covertness. Since the used signals are not designed for such a purpose and the illumination signals are many orders of magnitude more powerful than echo signals bouncing off targets, sophisticated signal processing is required.

This presentation will give an introduction inner workings of the passive radar technology and present the research activities at armasuisse Science + Technology in this field. Important signal processing concepts will be described and results of measurement campaigns with the armasuisse research demonstrator will be presented.

**Zeit:** Freitag, 21.02.2020, 10:15 Uhr

**Ort:** **Hörsaal A97**, Gebäude Exakte Wissenschaften, Sidlerstrasse 5, Bern, Schweiz