

# Kolloquium Satellitennavigation

## The value of a “perfect” GNSS receiver clock

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In safety-of-life applications of GNSS, integrity monitoring deals with the all-important question: Is the (unknown) error in a given position estimate less than a certain preset threshold? The question must be answered in real time and the consequences of a wrong answer can be disastrous. The basic idea is to guard against out-of-spec signals transmitted by the satellites and spurious signals introduced by a malicious source. WAAS, LAAS, EGNOS, and other GNSS augmentations developed for civil aviation have not had an easy time of integrity monitoring for precision approaches. We'll discuss a novel approach to the problem based on an overlooked resource: the receiver clock. The hypothetical perfect receiver clock would make integrity monitoring easy. A “predictable” clock, a realistic option, would come close to achieving the same objective.

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Datum und Zeit: Freitag, den 9. März 2018, 14:00 – 15:00 Uhr

Ort: Deutsches Zentrum für Luft- und Raumfahrt (DLR),  
Oberpfaffenhofen, Institut für Kommunikation und Navigation,  
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