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## **ABSTRACTS**

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## CONDITION OF ULTRASONIC DISTANCE MEASUREMENT SYSTEM

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**Abstract:** There are several types of position sensors, which can be used for distance measurement. There is a need for more accurate distance sensor. Ultrasonic sensor are very popular mainly in robotics application as navigation sensor for contactless sensing of obstacles for navigation purpose. Ultrasonic distance sensor uses often time to flight principle for measurement. Some of them also uses Doppler Effect for distance measurement. The aim is to obtain uncertainty measurement for measurement chain with ultrasonic distance sensor. Uncertainty of measurement quantifies how it is possible to believe to measurement results.