

# Phase Based Localisation Using Interval Analysis

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## **Abstract**

This paper is about a way of solving the localization issue using interval analysis based on the phase of a known received signal. The principle of this approach is to represent the nonlinear localization problem as a Constraint Satisfaction Problem (CSP). Then use contractions to propagate the information from the measured data to the unknown variables, back and forth, until an equilibrium is found. Two examples will be discussed, using one receiver then two receivers.