

# Avoiding contact at all costs? - Challenging an interaction paradigm in a Subject Study (Team Project)

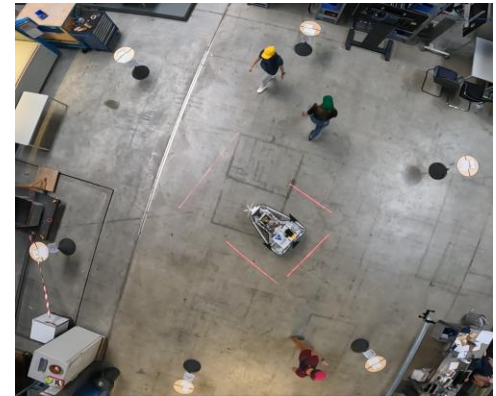
## Starting Point and Objective

Mobile Robots already share the shop floor of current industrial sites with human co-workers. Encounters with them are, however, not yet at the human-to-human level regarding efficiency and smoothness. This study aims to investigate whether allowing physical contact can enable this and tests realistic interactions for this purpose. The goal is to examine the influences on these interactions' efficiency, safety, and satisfaction.

## Possible Tasks (for team members)

An existing study setup (figure on the right) needs to be set up and adjusted to conduct a participant study. Ideally, this will be a team project. Possible work aspects for each team member can include (depending on team composition):

- Setting up and evaluating the motion tracking of humans and the robot
- Study design + ethics approval
- Researching & Implementing Autonomous navigation on the robot OR Wizard-of-Oz approach
- Together: running the study with experiments



Study with the CoHEXist Setup

## Requirements:

Self-reliance and autonomy  
Very good knowledge of German or English



## Advantageous:

Interest in Human-Robot-Interaction  
Prior experience with the possible work packages

## Can start from:

Now (Published 20.10.24)

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