



**Cork Constraint Computation Centre**

University College Cork

"Making Hard Choices Easier"



# OUCH!

## Online Uncertain Constraint Handling

### Project Description

Many real resource allocation problems change as their solutions are being executed: e.g. scheduling repair operations, or assigning deliveries to couriers. The problems grow as time progresses and new tasks arrive. We should allocate tasks to ensure efficient use of resources, and we must start doing so before the full problem is known. In this project, we are attempting to extend constraint programming to reason about such problems. We assume that we have some uncertain knowledge of what the changes might be, and we are developing online algorithms which will produce partial solutions and extend or modify them as the problem develops.

### Principal Investigator

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### Project Collaborator

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