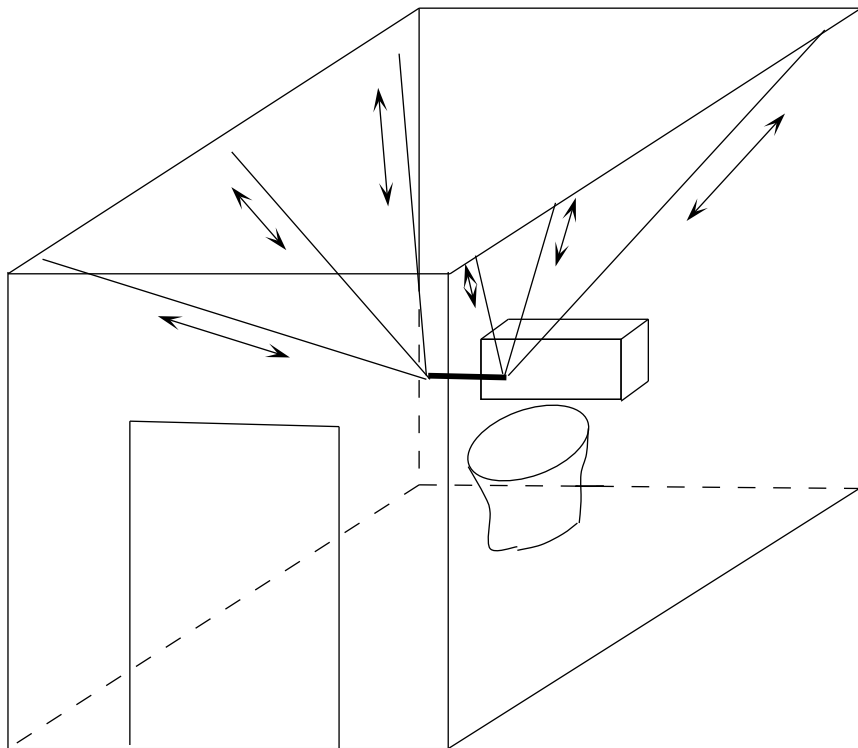
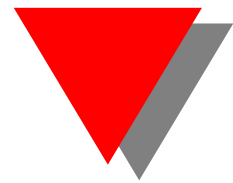


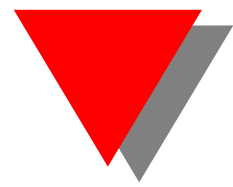
# **CARLA: Concept of Adaptable, Robotized, Lifting Assistant**

J-P. Merlet  
INRIA



- lifting wire-driven help
- for elderly, handicapped
- portable rescue crane, . . .
- low cost hardware
- low intrusivity (↑ ceiling)
- can also be used as a simple grasping tool

**breakthrough:** automated installation software for adapting the robot to the end-user, its environment



- **hardware** already available (wire actuator  $\leq$  100 euros)
  - **control**: difficulties lie in the kinematics equations, easy implementation (micro-controller  $\leq$  100 euros)
  - **interface**: KISS ! (remote tv set, wii, 3D mouse, ...)
  - **adaptation**: software to find the design adapted to the end-user and its environment (large development cost but distributed among all users  $\Rightarrow \leq$  10 euros)
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- **Total cost**:  $\leq$  1000 euros