

Who are us? □

ASLab, the Autonomous Systems Laboratory is a research group focused on the development of technology for robust autonomy. ASLab is a research group of the [Technical University of Madrid](#).

If you've read anything at all about Autonomous Systems (ASys), you'll probably know at least three things:

- ASys are the most exciting target for technical research,
- ASys can be really, we mean really, complicated, and lastly
- ASys are absolutely, outrageously, often unaffordably expensive in effort to build.

While ASLab is set to change all that it is not so different from the normal models for academic research. But, in a sense, we do all our activities from an industrial-biased stance. We want to develop technology for autonomous systems in the real world, so they will free humans from supervising them once they're up and running. They will self-manage.

ASLab Research Lines

- Integrated control architectures
- Model-based control systems
- Ontologies for autonomous systems
- Development processes for complex controllers
- Reusable control components
- Real-time middleware and platforms for distributed control
- Retargetability of embedded control components
- Technology of systems self-awareness
- Philosophical implications of the technology of self-aware machines

Recent/ongoing research projects

- COMPARE: A Component approach for real-time and embedded
- AMS: Autonomous Modular Systems
- MERCED: A market enabler for re-targetable COTS
- ICEA: Integrating cognition, emotion and autonomy

- HRTC: Hard real-time CORBA
- C3: Conscious Intelligent Control
- HUMANOBS: Virtual humanoids that learn from interaction

If you want more info, please visit our website www.aslab.org .