



TRANSPORTATION & INFRASTRUCTURE LABORATORY

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Description of the activity

The research activities of the Laboratory concern land transport systems, maglev system, planning and management of urban public transport systems and the design of roads and railways.

The research is also focused on the study of sustainable and integrated urban mobility using “zero” emission buses.

Educational software are available for designing of roads, railways and ropeways.

The laboratory is equipped with UAQ4 (University L'Aquila model 4) superconducting magnetic levitating transportation system prototype the suspension and propulsion devices of which have been patented and successfully tested.

Linear and circular experimental equipments allow to simulate and measure the levitation and propulsion forces in a wide spectrum of variables.

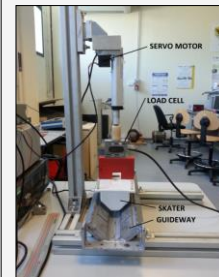
Finally the Laboratory supports teaching activities of the Departments regarding Courses related with transportation engineering and roads/railways construction topics.

Equipment

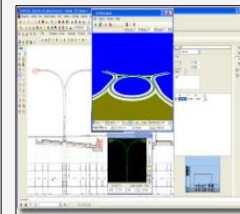
- Superconducting magnetic levitation transportation system prototype;
- Linear and circular instrumentations for tests and measurements of magnetic levitation and propulsion forces;
- Software for design of public urban mobility
- Educational software for preliminary design of ropeways
- Commercial software for design of road and rail infrastructures



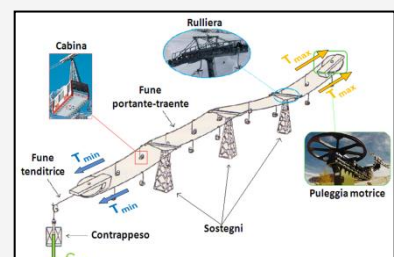
SUPERCONDUCTING MAGNETIC
LEVITATING SYSTEM PROTOTYPE



DEVICES FOR LEVITATION AND
PROPULSION TESTS



DESIGN OF ROADS AND RAILWAYS



PRELIMINARY DESIGN OF ROPEWAY
SYSTEMS