



Continuous Innovation in Fluid Power

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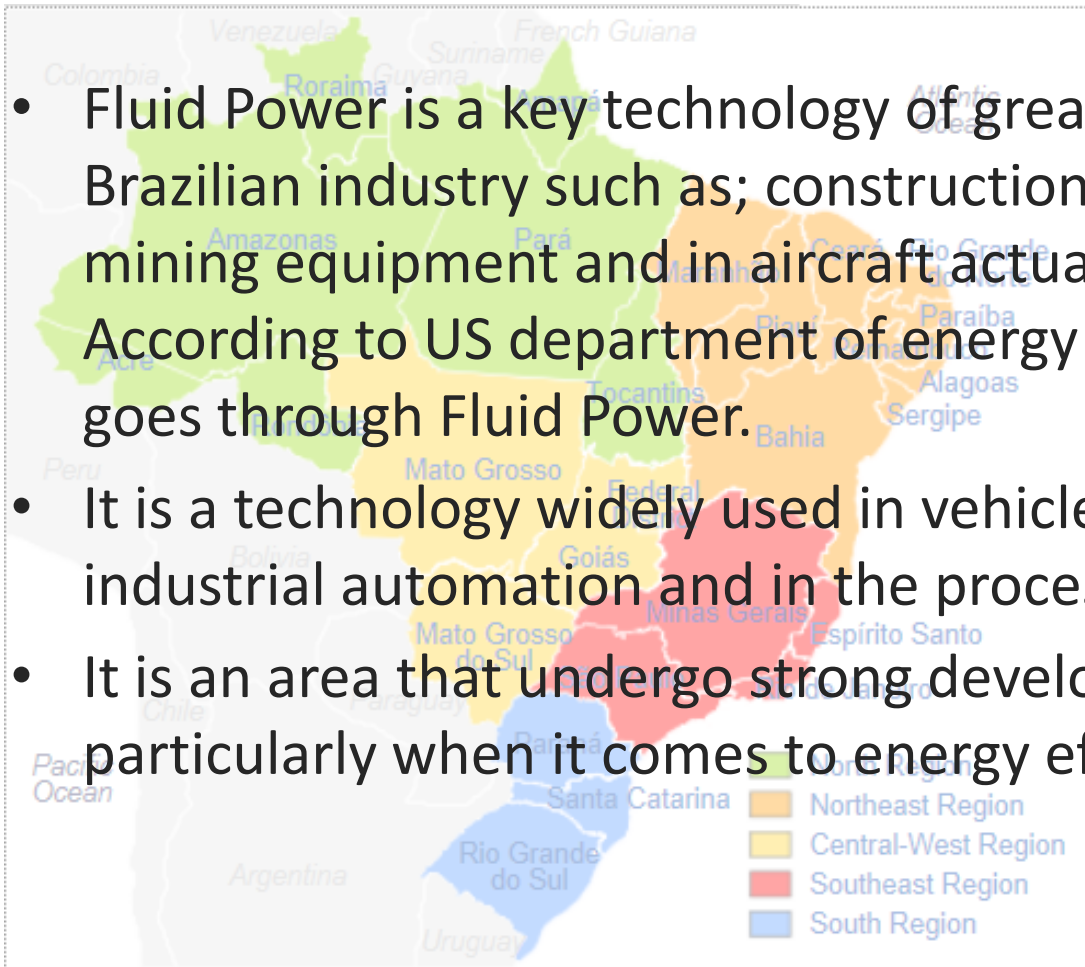
Fluid Power (Hidráulica e Pneumática)



- Systems that are characterized by a close coupling between:
 - Mechanical system
 - Power transmission/Actuation system
 - Sensors
 - Control System
- This requires a holistic view, i.e. Mechanical design and control system co-design where modelling and simulation are central

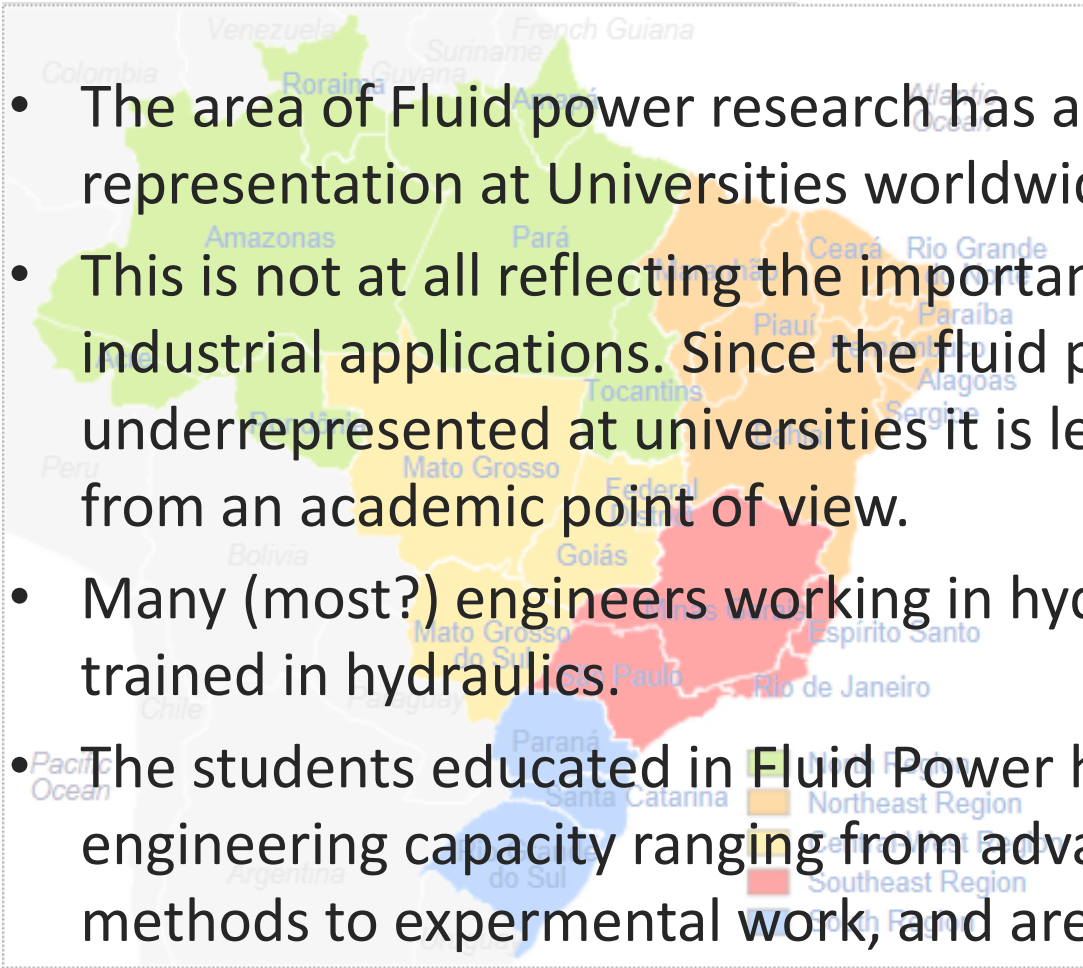
Fluid Power (Hidráulica e Pneumática)

- Fluid Power is a key technology of great importance to Brazilian industry such as; construction machinery, mining equipment and in aircraft actuation systems. According to US department of energy 3% of all energy goes through Fluid Power.
- It is a technology widely used in vehicle application, in industrial automation and in the process industry.
- It is an area that undergo strong development particularly when it comes to energy efficiency.



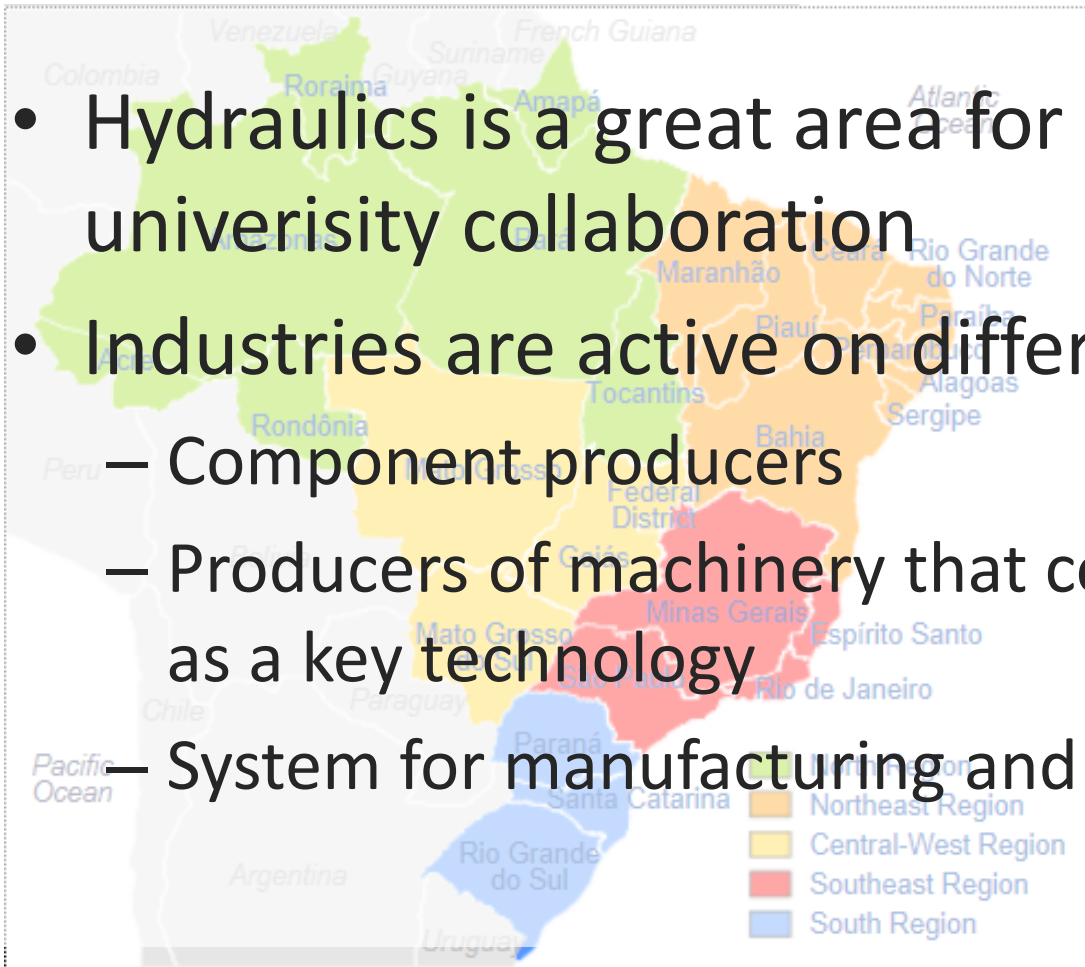
Fluid Power (Hidráulica e Pneumática)

- The area of Fluid power research has a relatively small representation at Universities worldwide.
- This is not at all reflecting the importance that it has in industrial applications. Since the fluid power area is underrepresented at universities it is less “crowded” from an academic point of view.
- Many (most?) engineers working in hydraulics are not trained in hydraulics.
- The students educated in Fluid Power have a broad engineering capacity ranging from advanced analytical methods to experimental work, and are also attractive outside the hydraulics field

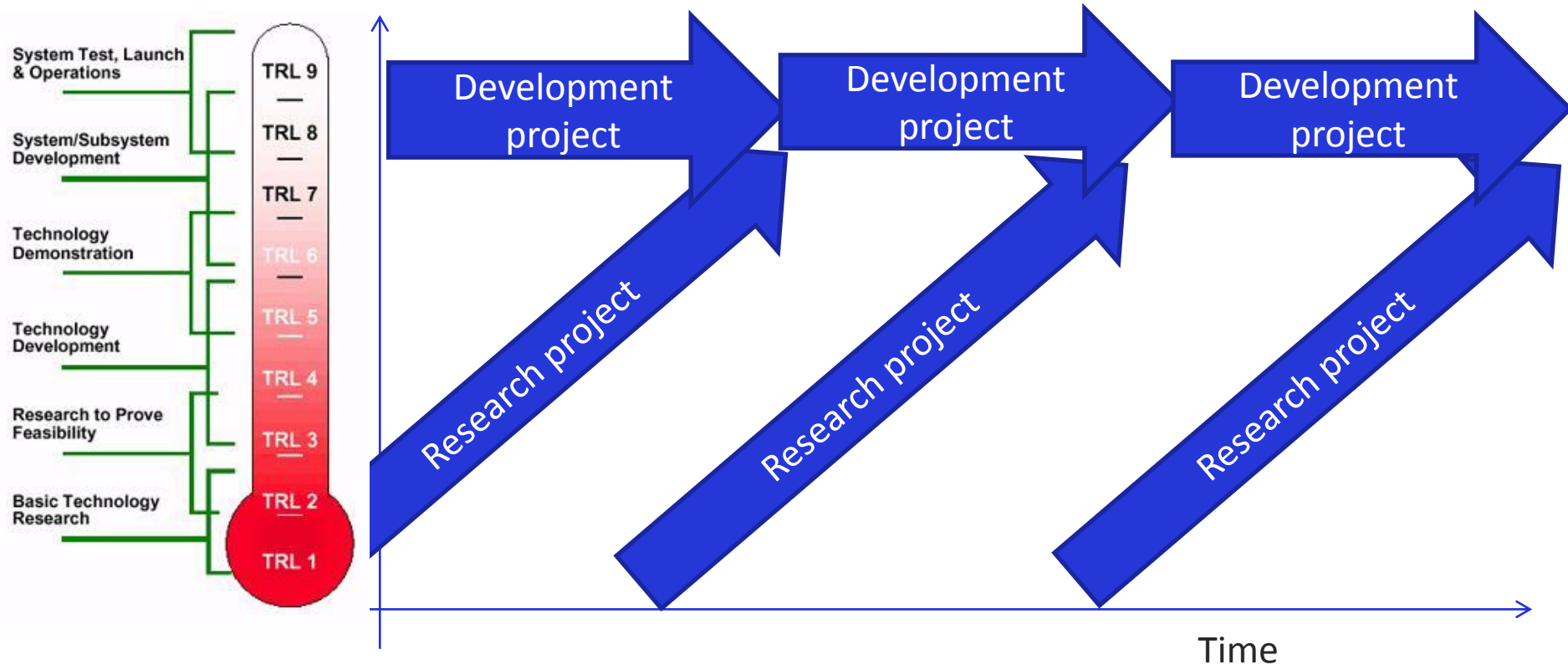


Fluid Power (Hidráulica e Pneumática)

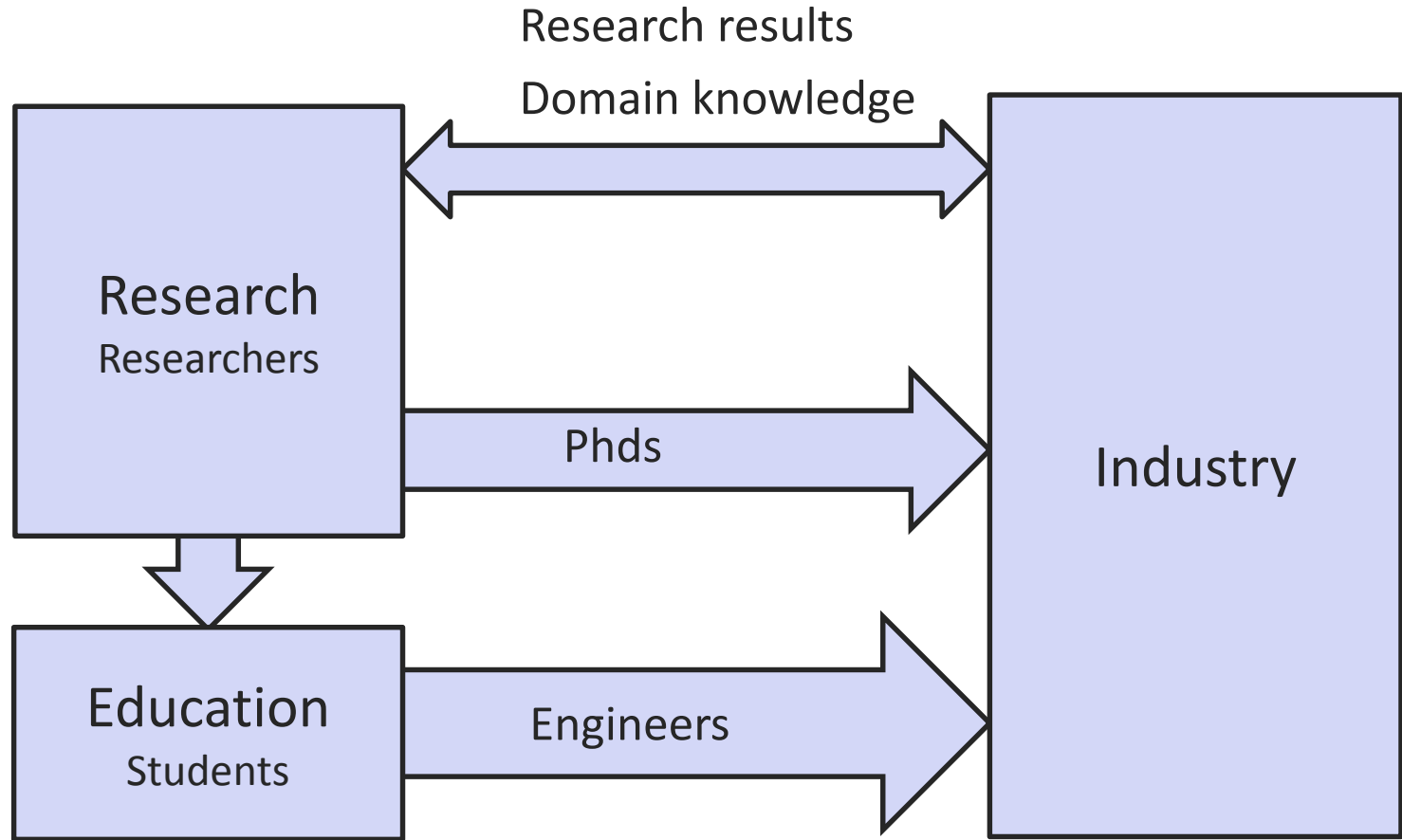
- Hydraulics is a great area for industry – university collaboration
- Industries are active on different levels
 - Component producers
 - Producers of machinery that contains hydraulics as a key technology
 - System for manufacturing and process industry



Research and Product Development



Applied University Research for the Generation of Excellent Engineers



Opportunity to Innovate



1st Workshop on Innovative Engineering for Fluid Power – WIEFP 2012



2nd Workshop on Innovative Engineering for Fluid Power – WIEFP 2014



15th Scandinavian International Conference on Fluid Power", SICFP'17

- SICFP'17, will be arranged at Linköping University, Linköping, Sweden, June 7-9,
- **November 13, 2016:** Extended abstract submission, typical 2 pages
- **April 17, 2017:** Final paper submission
- **June 7-9, 2017:** SICFP'17 Conference at Linköping University Campus
- **June 10, 2017:** Visiting tours for [Elmia](#) [Wood](#) Forestry Trade Fair 2017 in Jönköping.