



LORIA Computer Science and health related activities

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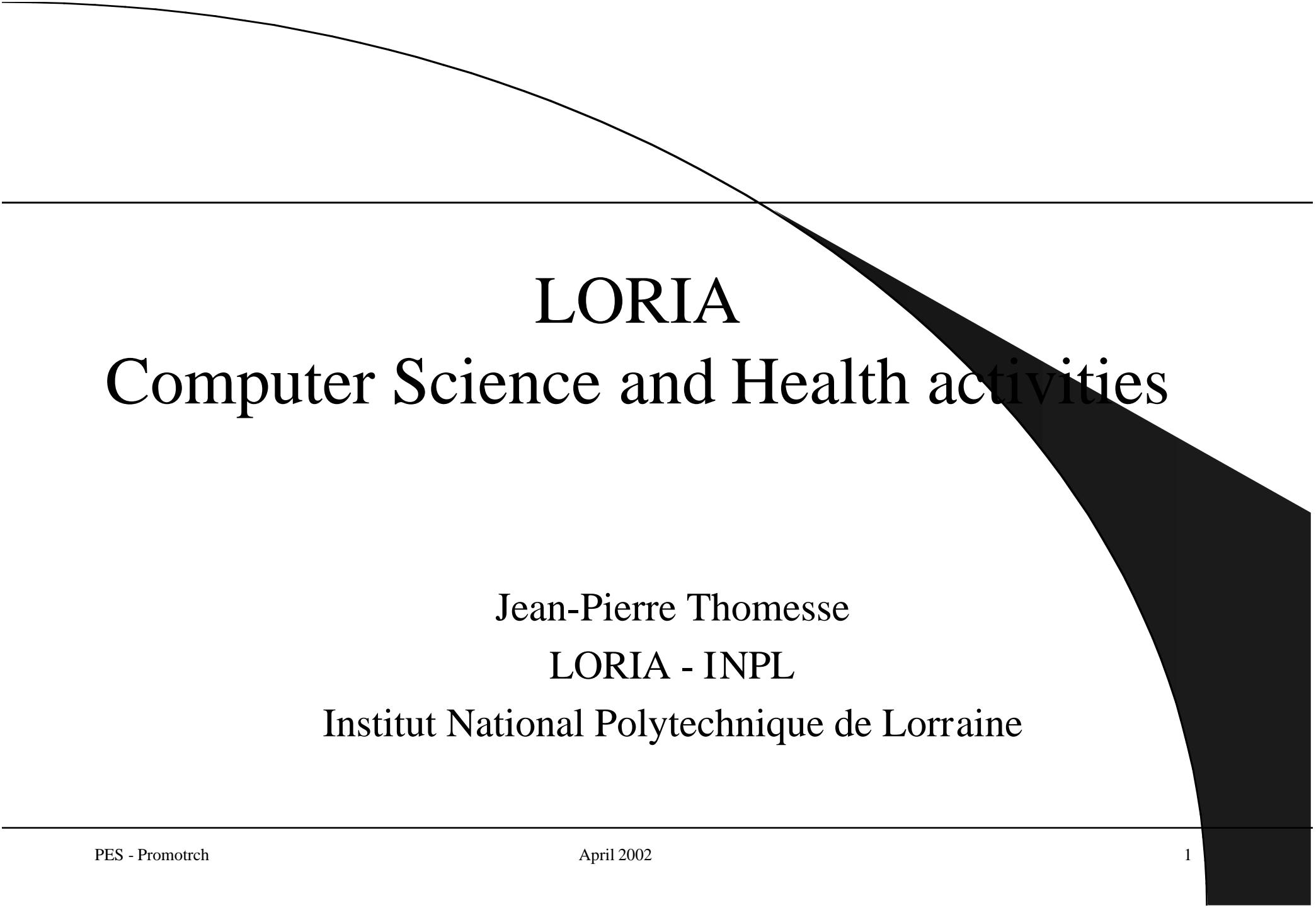
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LORIA

Computer Science and Health activities

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LORIA

- 1 laboratory in computer science and applications
- 1 INPL, UHP, Nancy2, INRIA, CNRS
- 1 ~400 researchers
- 1 25 teams
- 1 common actions based on applications as :
 - health
 - transport

action Quant Ô

- 1 Computer Aided Diagnosis - Telemedicine
 - based on health status modelling
 - periodic data acquisition
 - alarm generation
 - self learning systems
- 1 Image analysis and synthesis - virtual reality
 - 3D images reconstitution
 - surgeon training
 - neurology, cardiology, urology, E

action Qant Ó

1 Telemedicine - CAD - applications

- kidney disease
- heart failure patients
- high blood pressure patients
- diabetes
- anaesthesia follow-up
- elderly people

DI ATELIC: a new generation telemedicine system

- 1 interaction between the users
 - patient (CAPD)
 - physician
 - nephrologist
- 1 data acquisition and transmission
- 1 data analysis - health status model
 - diagnosis establishment
 - alarms detection and transmission
 - patient feedback
 - physician information

results

1 medical results

- half of hospitalisation days
- less consumption of drugs
- best weight
- best blood pressure

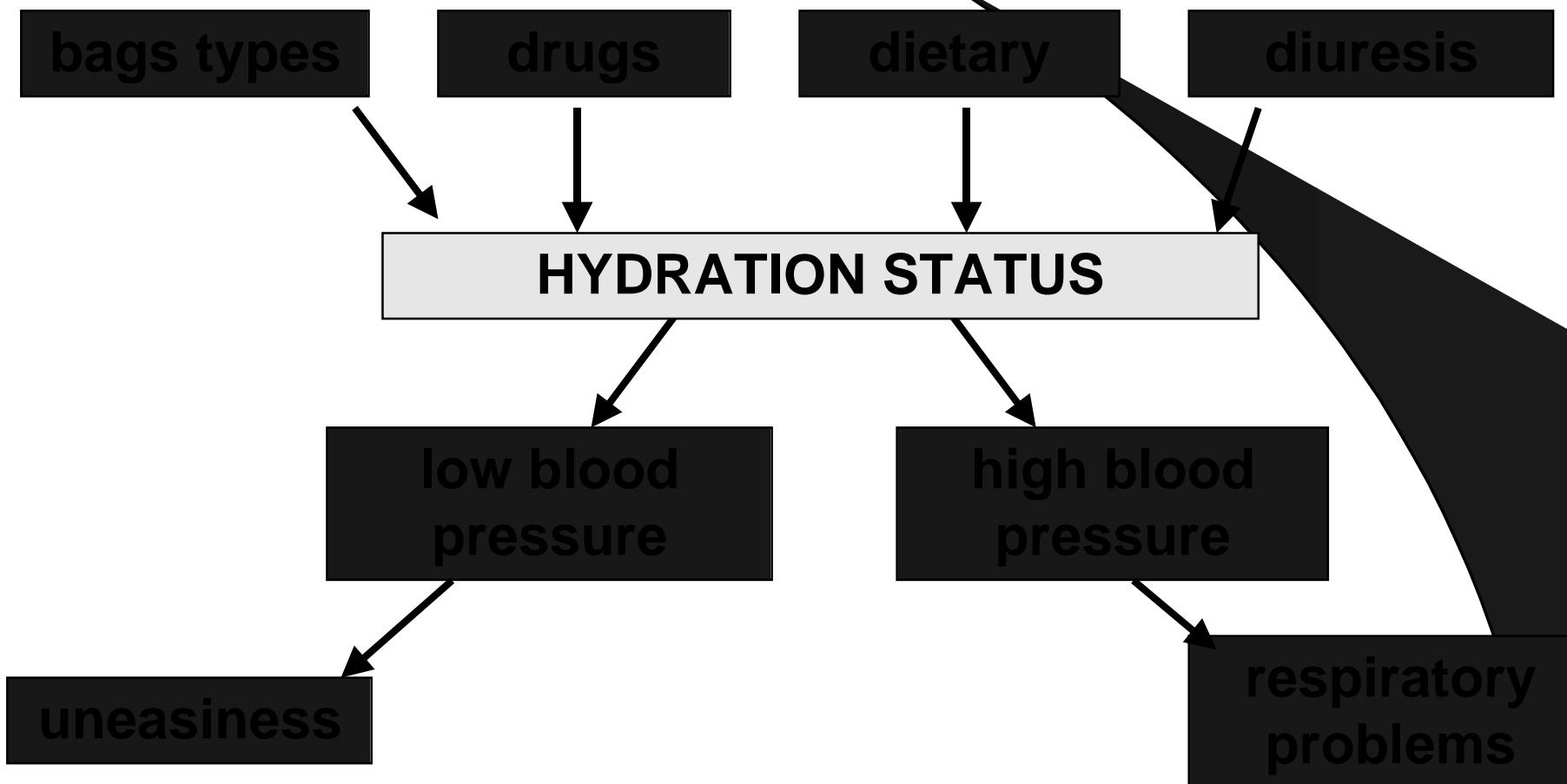
1 economical results

- economy of 10 000 euro/patient/year
- economy of time for physicians

~~methodology~~

- ① co-operation with physicians
- ① modelling stage, development and test
- ① medical experiment, validation
- ① patents
- ① start-up, PHIATELIC SAÓ
- ① equipment of 150 patients in Lorraine in 2002

~~usual problems~~



Pathological State Space

