

# Grid purpose

## Technological evolution

CPUs cheap and many, big ones not really economical

Core networks fast and cheap

## Replace servers by services

a historical trend in computing

## Security

a necessity

but also a motivation for grid architecture

may be a new business model for software

# standardization

Meditate the lessons of Internet' success

principle of scalability

principle of robustness

What is standardized

protocols

APIs

middleware

Never: complete packages

# We need still much more research

Architecture

Security

Data

Management

Fail safe operation

Automatic resource discovery and allocation

Ease of deployment

Understanding the needs of various applications