FH AACHEN
UNIVERSITY OF APPLIED SCIENCES

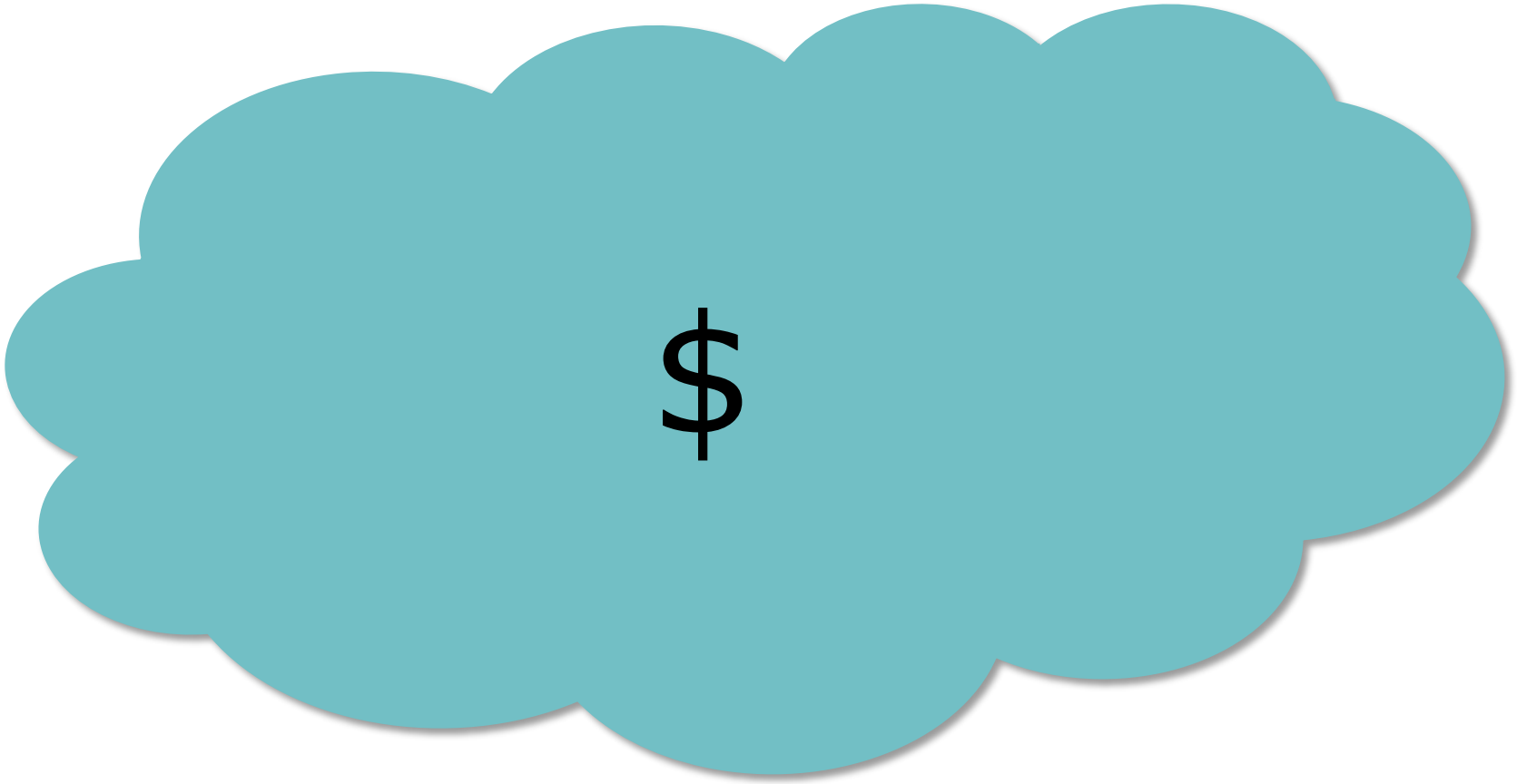
# Adaptive Scheduling of Workflows on Clouds with Deadlines

Michael Gerhards[1,2], Volker Sander[1],
Adam Belloum[2], Marian Bubak[2]

Cracow Grid Workshop (CWG)- 27/10/2014

**1** FH Aachen - University of Applied Sciences (Germany), 2 University of Amsterdam (Netherlands)

# Wanna save Money using the Cloud?



# Temporary Cloud Computing Infrastructure

## Properties

- Horizontal scalability
- Vertical scalability
- Typically hourly billing
- On demand provisioning

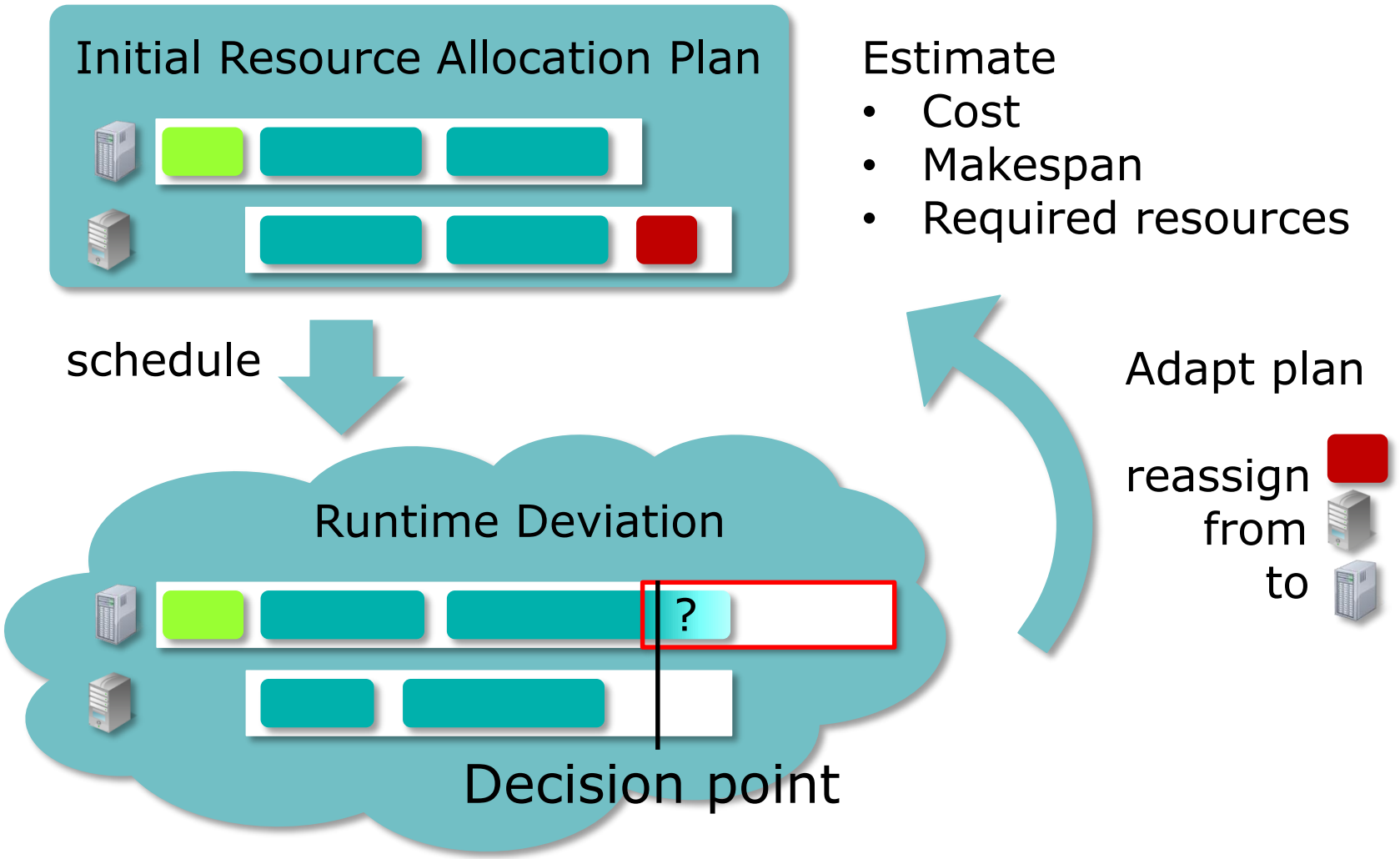
## Questions

- How many resources?
- Type of resources?
- How long?
- When?

DEADLINE vs. COST

Trade-off between deadline and cost constraints

# Idea: Adaptive Scheduling



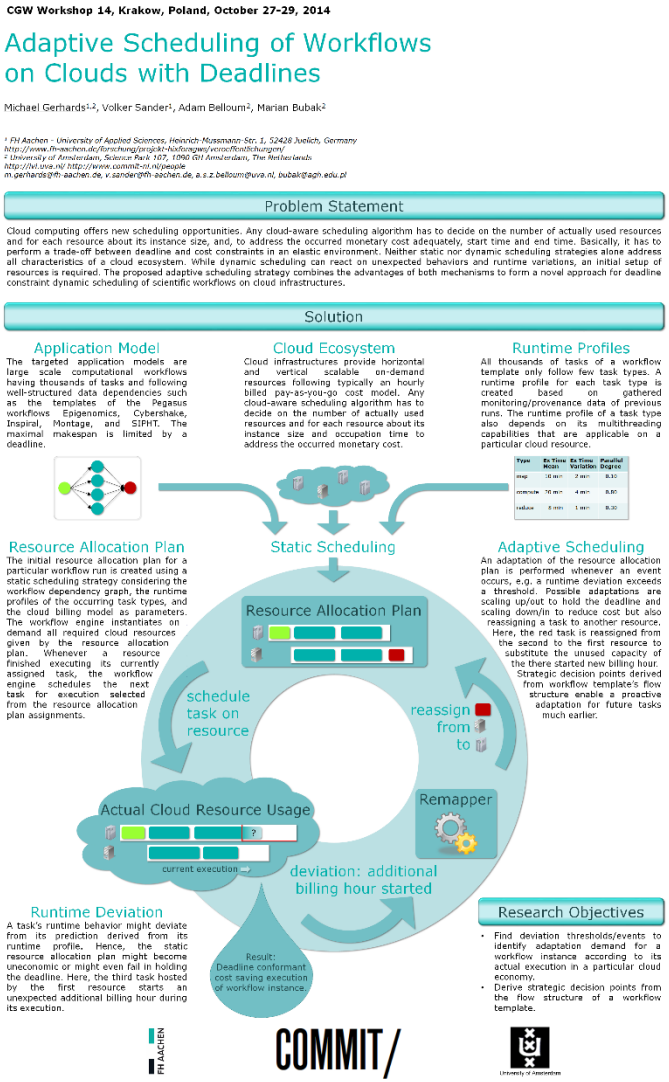
# Solution: Visit us at our Poster

Michael

Adam

Volker

Marian



Michael GERHARDS, M.Sc.

FH Aachen – University of Applied Sciences
Campus Jülich

Germany
Heinrich-Mußmannstraße 1
52428 Jülich
T +49. 241. 6009 53791

M.Gerhards@fh-aachen.de, V.Sander@fh-aachen.de,
A.S.Z.Belloum@uva.nl, Bubak@agh.edu.pl

http://www.fh-aachen.de/en/research/projekt-hixforagws/veroeffentlichungen/
http://commit-nl.nl/