StarPlane

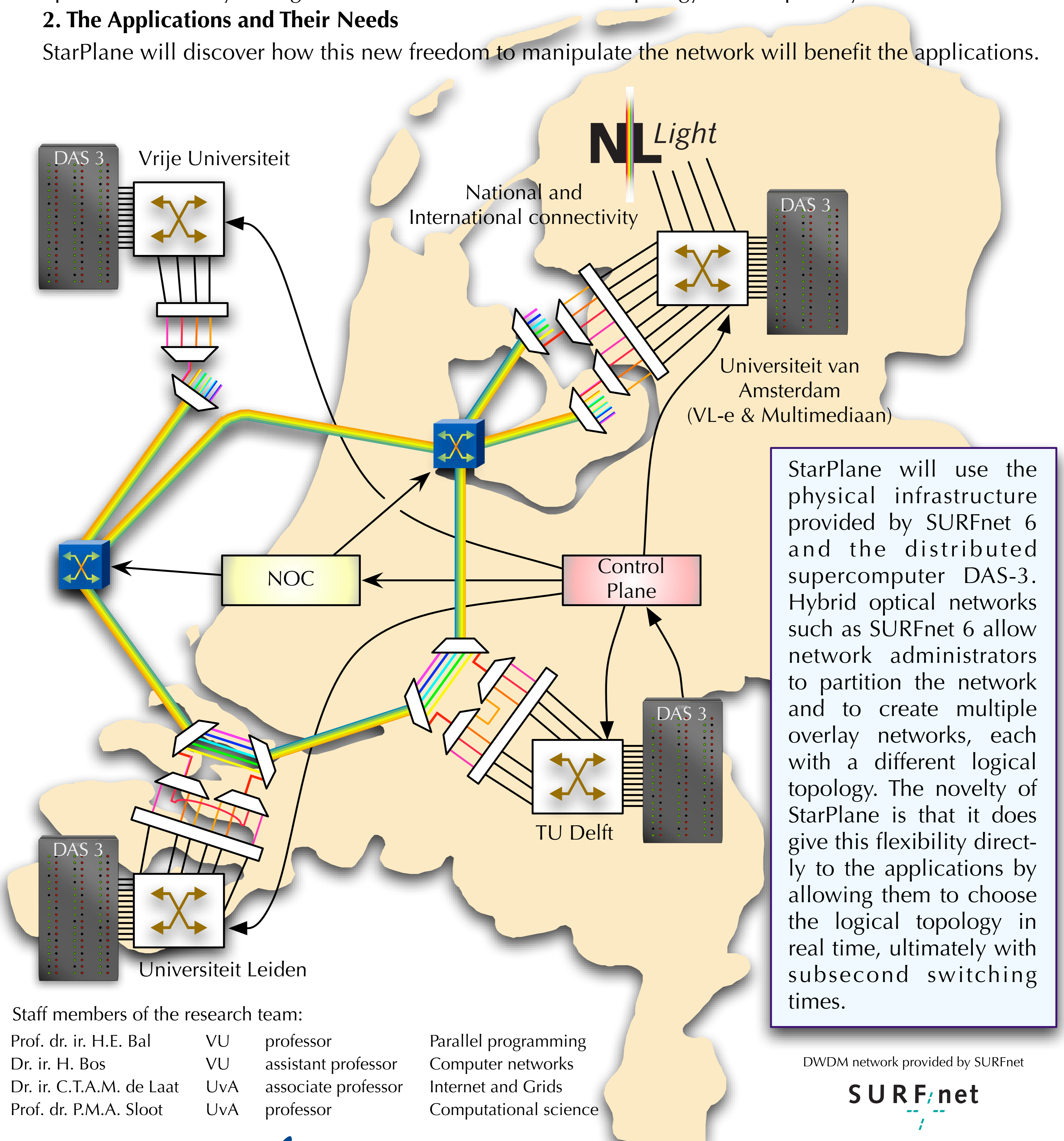## application-specific management of optical networks

The StarPlane project addresses two concerns in optical networks:

1. The Basic StarPlane Management Infrastructure

StarPlane allows applications to take advantage of the increased bandwidth and potential flexibility in optical networks by letting them create their own network topology in a simple way.

2. The Applications and Their Needs

StarPlane will discover how this new freedom to manipulate the network will benefit the applications.

NLLight

National and International connectivity

DAS 3

Vrije Universiteit

DAS 3

Universiteit van Amsterdam (VL-e & Multimediaan)

NOC

Control Plane

DAS 3

TU Delft

DAS 3

Universiteit Leiden

StarPlane will use the physical infrastructure provided by SURFnet 6 and the distributed supercomputer DAS-3. Hybrid optical networks such as SURFnet 6 allow network administrators to partition the network and to create multiple overlay networks, each with a different logical topology. The novelty of StarPlane is that it does give this flexibility directly to the applications by allowing them to choose the logical topology in real time, ultimately with subsecond switching times.

Staff members of the research team:

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DWDM network provided by SURFnet

SURFnet

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