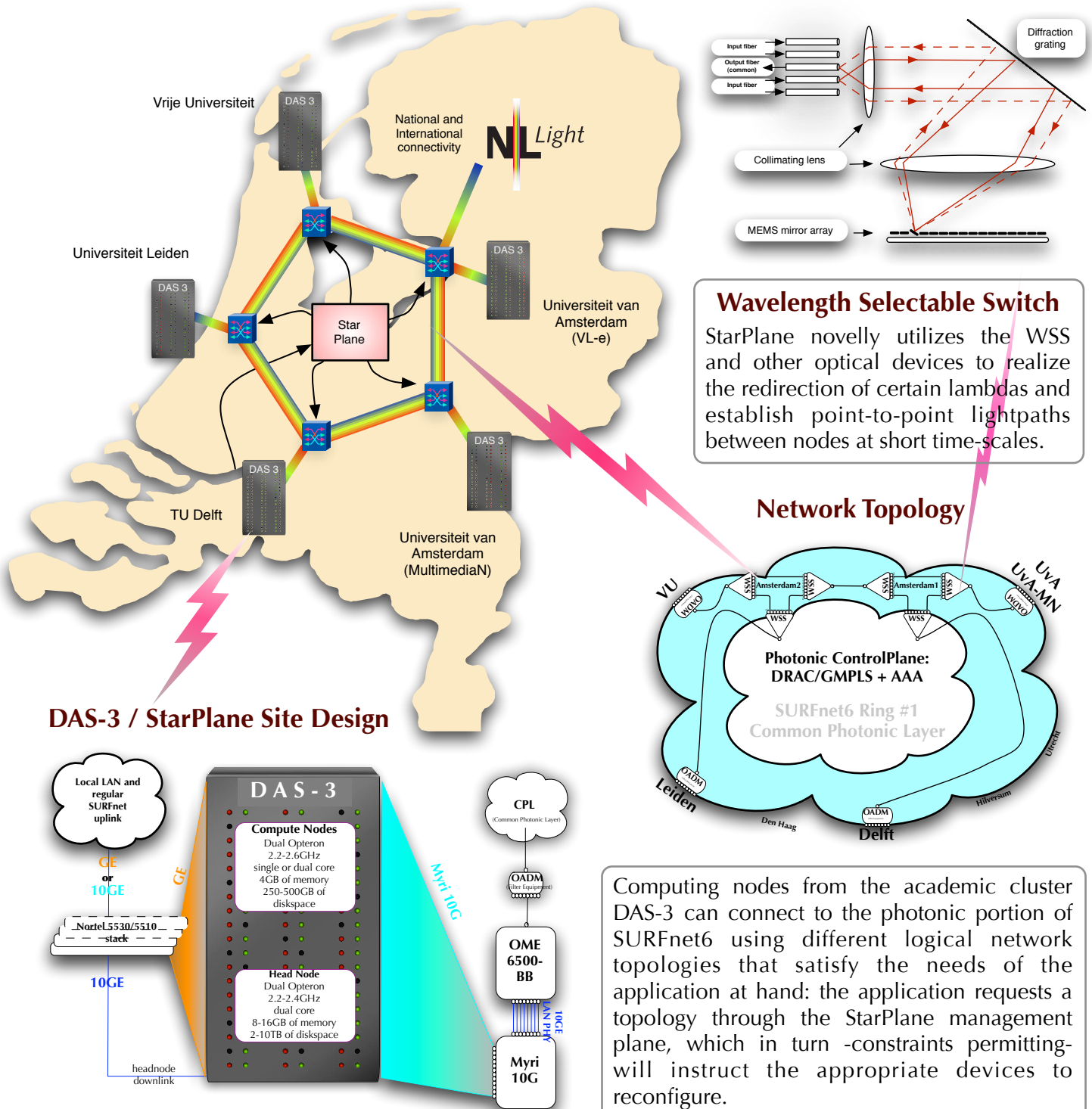


Application-specific Management of Photonic Networks

StarPlane is a NWO funded project of the University of Amsterdam (UvA) and the Vrije Universiteit (VU). The project investigates how to enable applications to dynamically manage and control photonic networks. It takes advantage of two new infrastructures: the hybrid SURFnet6 network and the DAS-3 grid cluster; it will develop the management and control plane that will enable applications to access, manage and use the network resources in a real time fashion.



Wavelength Selectable Switch
 StarPlane novelly utilizes the WSS and other optical devices to realize the redirection of certain lambdas and establish point-to-point lightpaths between nodes at short time-scales.

Network Topology
 Computing nodes from the academic cluster DAS-3 can connect to the photonic portion of SURFnet6 using different logical network topologies that satisfy the needs of the application at hand: the application requests a topology through the StarPlane management plane, which in turn -constraints permitting- will instruct the appropriate devices to reconfigure.

Members of the research team

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