



# THE WHITE ROSE GRID

## e-Science Centre of Excellence

### Note to White Rose Researchers

#### Exploiting the UKLight experimental network from within the White Rose Universities

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#### 1. Background

A number of White Rose Grid (WRG) projects require high-speed data communication in the range of Gigabit/second or above, often sustainable for longer periods. For those projects that may utilise a point-to-point connection between White Rose Grid systems (<http://www.wrgrid.org.uk>) and the facilities in the USA available through the StarLight network (<http://www.startap.net/starlight/>) or in the Netherlands through the NetherLight network (<http://www.surfnet.nl/info/innovatie/netherlight/home.jsp>), the WRG has been awarded the UKLight connection.

In parallel with these projects, which WRG Executive members are currently aware of, that would exploit the UKLight experimental network, **we would like to hear from any other projects interested in using this optical network facility to advance their research and enhance either national or international collaborations.**

#### 2. About UKLight

UKLight (<http://www.uklight.ac.uk/>) is a national facility funded by HEFCE, working under the policy guidance of the JISC (Joint Information Systems Committee), and managed by UKERNA. It supports projects working on developments towards optical networks as well as the applications that use them. It provides a hub at the University of London Computing Centre with 10 Gigabits/second links to StarLight in Chicago and NetherLight in Amsterdam. These connections are extended through a national development network to selected institutions in the UK and include a link to the White Rose Grid at Leeds. UKLight forms part of the Global Lambda Infrastructure Facility (GLIF; <http://www.glif.is/>) which is an international *virtual organisation* that supports persistent data-intensive scientific research and middleware development on LambdaGrids.

#### 3. Users' applications

Access to the UKLight network is transparent to end-users. Systems administrators and network staff may need to arrange physical connections at participating sites. Data intensive applications that are to be considered for exploitation of UKLight should need dedicated or high bandwidth switched connections, not provided by the current Janet production network. Good examples would be its use for bandwidth-intensive visualisation, or real-time access to large quantities of data, or rapid remote-viewing of medical images. Real-time demonstrations which generate large quantities of data on remote computers or from instruments and are exploited locally for analysis or visualisation are good candidates for UKLight. Applications that correlate large amounts of data from multiple sites or those with emphasis on data management and replication grids may also be eligible. Note that projects seeking to use UKLight are subject to approval by UKLight/UKERNA.

#### 4. Access to UKLight from within the White Rose Universities

Should you have **any project** that could advantageously exploit the WRG connection to UKLight please contact Dr J Schmidt ([j.g.schmidt@leeds.ac.uk](mailto:j.g.schmidt@leeds.ac.uk) tel: 0113 343 5375). We would like to hear from you even if your project is not from a typical application area mentioned above such as social sciences. It would be extremely useful to hear from White Rose researchers engaged in projects carrying out experiments, e.g. in physics or engineering, that require to undertake collaborative research and break through the distance limitations. All potential projects will need to be approved by UKLight.

#### 5. Further information

A leaflet describing UKLight is available at: <http://www.uklight.ac.uk/UKLight%20Flyer.pdf>

