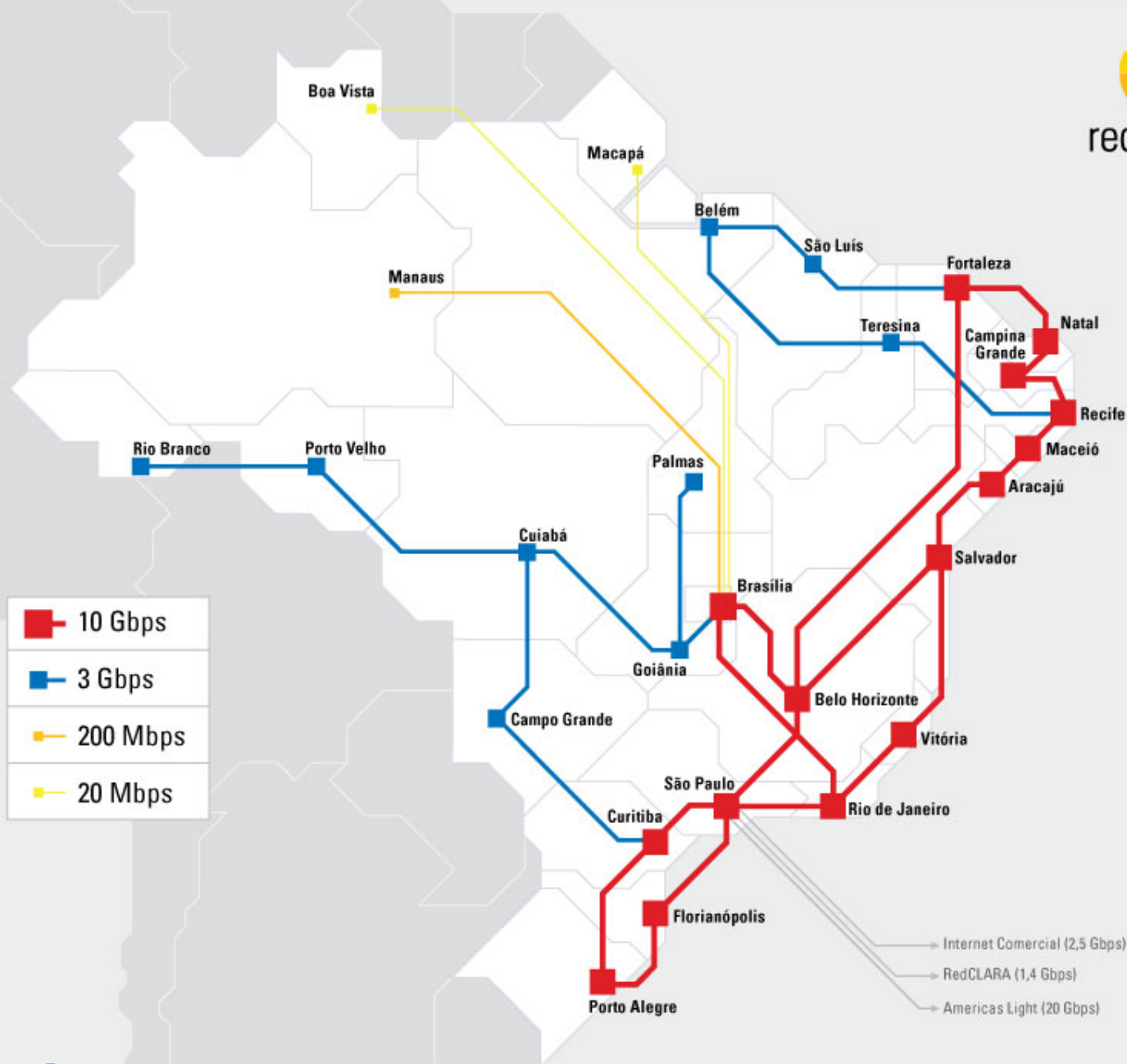




RNP

Brazil's National Education and Research Network



Agreement with local telco Oi, brokered by regulatory agency

Reaching 24 of 27 capitals (no terrestrial fibre to other 3 capitals)

 <http://www.rnp.br/backbone/>

The background of the slide features a long-exposure photograph of a race track at night. The lights from the cars have created long, curved streaks of yellow and orange, following the path of the track. The track itself is visible as a dark line with white markings, curving into the distance.

Hybrid Networks

- Since ~2002, NRENs have begun to provide 2 *network services*:
 - routed IP** (traditional Internet)
 - end-to-end virtual circuits** (aka “lightpaths”)
 - This lightpath service is intended for users with high QoS needs, usually guaranteed bandwidth, as is implemented by segregation between their traffic and the general IP traffic.
- The **GLIF** organisation (www.glif.is) coordinates international collaboration using lightpaths

Dynamic Lightpath Establishment

The Cipó experimental service

- We are now beginning to deploy **dynamic circuits** as an **experimental service** on our network
 - This will also interoperate with similar services in other networks.

The image displays two overlapping screenshots of the MEICAN web interface. The background screenshot shows the 'New circuit name' form with the text 'CeBIT reservation'. The foreground screenshot shows the 'New Reservation' dashboard with a map of South America. The map highlights Brazil (Brazill) and Argentina with red pins, and a blue line connects them across the Atlantic Ocean. The interface includes a sidebar with 'Circuits', 'Reservations', and 'Users' sections, and a right-hand panel with 'Source' and 'Destination' configuration options.

Source	
Domain	Internet2
Network	Michigan
Device	RTR CHIC
Port	xe-6/0/0
VLAN Type	<input checked="" type="checkbox"/> Tagged
VLAN	3800
200 Mbps	
Destination	
Domain	UFRGS
Network	Instituto de Informática
Device	Extreme
Port	5
VLAN Type	<input type="checkbox"/> Tagged
VLAN	700

ON, the National Observatory, was previously selected as a beta-tester

LINeA

Interinstitutional Lab of e-Astronomy

Institutions:

- ON: National Observatory
- LNCC: National Lab for Scientific Computing
- CBPF: The *Brazilian Center* for Physics Research
- RNP

Projects:










- Dark Energy Survey
- SDSS III

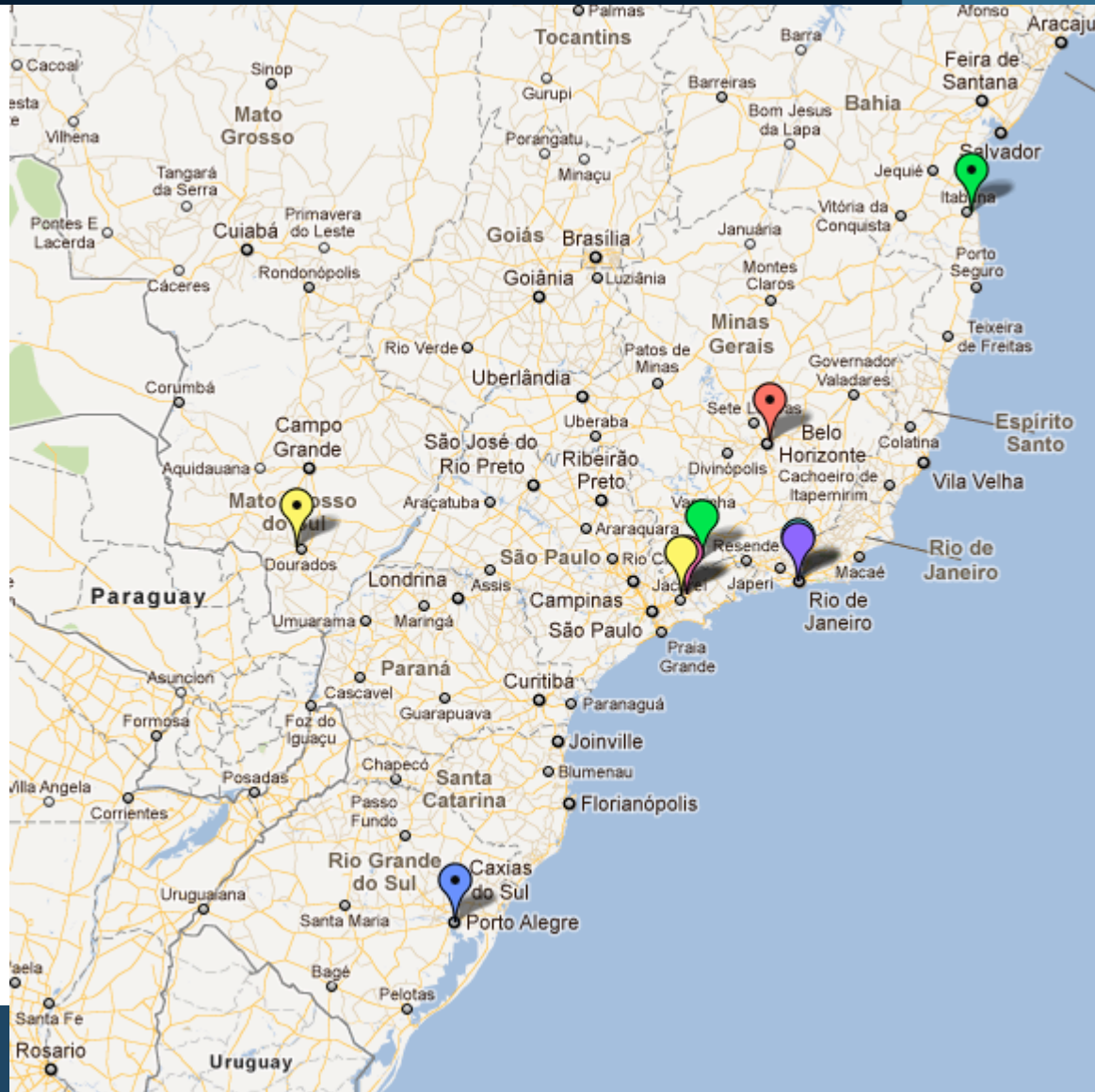
Source	Data	Hostname
LBL	DR8 Datasweeps	data.sdss3.org
SLAC	Addgals	www.slac.stanford.edu
NCSA	LSST	lsst1.ncsa.uiuc.edu
NCSA	DC5*	cosmology.illinois.edu
FNAL	PreCam	desar.cosmology.illinois.edu (offline for maintenance)
CTIO	PreCam	Temporary server, now offline
JHU	DR8 Database	gwln1.pha.jhu.edu



SOAR - Southern Astrophysical Research Telescope

Academic connectivity from user institutions

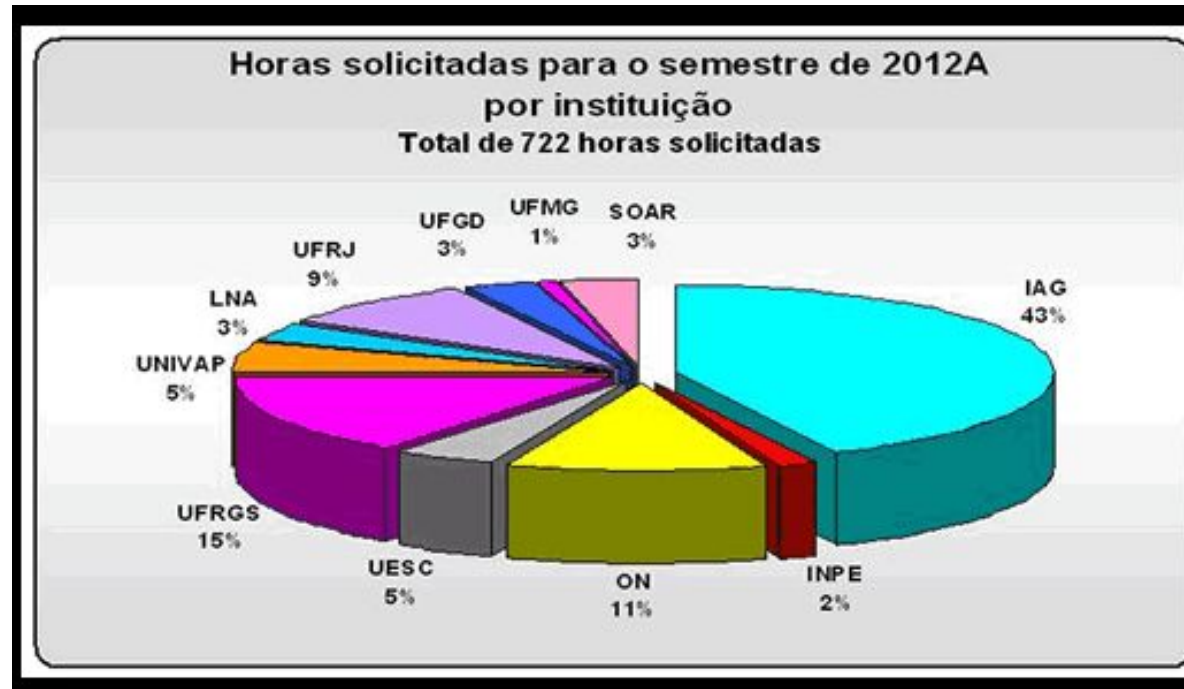
-  UFRGS - 1Gbps
-  UFGD - 34Mbps
-  INPE - 155Mbps
-  UESC - 50Mbps
-  UFMG - 1Gbps
-  UFRJ - 1Gbps
-  ON - 34 Mbps / LineA - 10Gbps
-  UNIVAP - 155Mbps
-  LNA - 34Mbps



SOAR - Southern Astrophysical Research Telescope

Academic connectivity from user institutions

- UFRGS – 1Gbps
- UFRJ – 1Gbps
- UFMG – 1Gbps
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- ON – 34 Mbps
- LNA – 34Mbps
- UFGD – 34Mbps



Thank you / Obrigado!

