

P34: Sapienza-Università di Roma - UNIROMA1 (Italy)

Description of expertise & activities

University of Roma "La Sapienza" is a public university institution devoted to high level education and excellence research. The research activities on Optical Networks are carried out by the Networking Group of the INFOCOM Department (NGID – <u>http://net.infocom.uniroma1.it</u>). NGDI works in a broad range of topics areas (e.g. optical networks, IP networks, wireless networks) by developing a complementary mix of theoretical and applied experimental research.

NGID currently counts around 40 members, including 5 professors and 7 post-docs. NGID is a partner in CORITEL, an Italian Consortium fund in 1994 and composed by two industrial partners, Ericsson Lab Italy and ITS, and several most important Italian Universities; its mission is to promote the collaboration between academic and industrial worlds in order to realize common research projects and to allow reciprocal know-how transfer. The people of the NGID are authors of many papers published on the most important technical journals and conferences in the area of telecommunication networks. They was involved in some Italian and European projects as INSIGNIA, EPERSPACE, TANGO, RINGO, PRIMO, EURO, BORA-BORA.

The main interests of the researchers of NGDI involved in optical activities include: definition of IP/WDM/GMPLS protocols for the optical control plane, performance evaluation and traffic engineering in optical networks, resource dimensioning and QoS provisioning in optical burst/packet switched networks.

Tasks within BONE

WP11	Comparison of traffic aggregation techniques in Metropolitan Area Optical Networks
WP14	Performance Evaluation of new optical switching paradigms and network architectures
WP24	Impact of OBS/OPS on upper layer protocols

Key personnel

Vincenzo Eramo received his "Laurea" degree in Electronics Engineering in 1995 and his "Dottorato di Ricerca" (PhD degree) in Information and Communications Engineering in 2001, both from the University of Roma "La Sapienza". From June 1996 to December 1996 he was a researcher at the Scuola Superiore Reiss Romoli. In 1997, he joined the Fondazione Ugo Bordoni as a researcher in the Telecommunication Network Planning group. From November 2002 he is an Assistant Professor in the Department INFOCOM, within the Networking group at University of Rome La Sapienza. His current research interests are focused on resource dimensioning techniques in Optical Packet Switches and performance evaluation of routing protocols in software router. He participated at several international research projects and has published more than forty papers on international journals and conference proceedings.

Marco Listanti received his Dr. Eng. degree in electronics engineering from the University "La Sapienza" of Roma in 1980. In 1981, he joined the Fondazione Ugo Bordoni, where has been leader of the group "TLC network architecture" until 1991. In November 1991 joined the INFOCOM Dept. of the University of Roma "La Sapienza", where he is Professor of Switching Systems. He participated at several international research projects supported by EEC and ESA and is author of several papers published on the most important technical journals and conferences in the area of telecommunication networks. His current research interests focus on traffic control in IP networks and on the evolution of techniques for optical networking.

Angelo Germoni received the degree in Electronic Engineering with full marks (Summa Cum Laude) from the University of Rome "La Sapienza" in 2006. He is currently a PhD student on Optical Networking in University of Roma "La Sapienza".