# BL LAC PHENOMENON

# PROGRAMME

### SUNDAY 21st

16:00-19:00 Registration
19:00-22:00 Welcoming Cocktail

## MONDAY 22nd

8.30 Registration
9:00 Opening ceremonies
9:15 Welcoming Address: The Rector of the Turku University

**BL Lacs and other AGNs** **Chair**

9:30 M. Urry: Perspectives of BL Lac objects
10:15 M. Marcha: The co-existence of BL Lacs and broad lines

10:30 Coffee

**Radio observations of BL Lacs** **Chair**

11:00 M. Aller: Radio-waveband flux and polarization variability
11:45 H. Teräsranta: Long term continuum monitoring of AGN with the Metsähovi and SEST telescopes
12:00 H. Aller: Radio polarization and flux density variability of BL Lacertae: Oblique shocks
12:15 A. Kraus: Intraday variability in BL Lac objects and quasars
12:30 A. Lobanov: Radiospectra and kinematics in Blazars
12:45 J. Fan: BL Lac objects and relativistic beaming model

13:00 Lunch

**Blazar observations in infrared and optical** **Chair**

15:00 H.R. Miller: The character of the optical variability of Mrk 421, Mrk 501 and 1ES2344+514
15:15 E. Massaro: Structure and timescales of the fast variations of BL Lacertae during the 1997 summer active phase
15:30 G. Tosti: The Perugia blazar monitoring program
15:45 S. Katajainen: Tuorla Monitoring program
16:00 M. Whiting: Red synchrotron jets in Parkes quasars

18:00 Turku City Reception

## TUESDAY 23rd

**BL Lacs in optical** **Chair**

9:00 V. Hagen-Thorn: Analysis of colour variability of blazar 3C66A in 1993-96
9:15 Y. Efimov: Polarization angle rotation of OJ 287 based on all available optical polarimetry
9:30 R. Hudec: Large amplitude flares on AGNs
9:45 J. Noble: A comparison of the optical microvariability morphology in X-ray selected and radio-selected blazars
10:00 J.A. de Diego: Comparative study of microvariability in radio quiet and radio loud quasars

10:15 Coffee

**BL Lacs in X-rays** **Chair**

10:45 I. McHardy: X-ray variability of BL Lacs
11:30 W. Brinkmann: ROSAT observations of PKS 2155-304
11:45 J. Siebert: Latest X-ray observations of intermediate BL Lac objects
12:15 F. Makino: X-ray variability of BL Lacertae in 1997 outburst
12:30 E. Pian: BeppoSAX observations of the BL Lac Mkn 501
12:45 A. Treves: Fast photometry of the BL Lac object PKS 2155-304

13:00 Lunch

**BL Lacs in gamma-rays** **Chair**

15:00 B. Hartman: CGRO observations of BL Lacs
15:45 V. Connaughton: BATSE observations of BL Lac objects
16:00 A. Lähteenmäki: Comparison of radio and EGRET $\gamma$-ray properties between BL Lacs and other AGN
16:15 A. Mücke: On the contribution of unresolved blazars to the extragalactic $\gamma$-ray background

16:30 Coffee

**TeV observations of BL Lacs** **Chair**

17:00 H. Krawczynski: Study of the temporal and spectral characteristics of the TeV gamma-radiation from Mkn 501 and Mkn 421 with the HEGRA system of imaging atmospheric Cherenkov telescopes
17:30 J. Quinn: TeV gamma-ray flux variability of Markarian 501
17:45 D. Petry: The MAGIC telescope-bridging the gap at 10-200GeV
18:00 M. Catanese: Multiwavelength observations of TeV emitting BL Lac objects

## WEDNESDAY 24th

**OJ 287** **Chair**

9:00 L. Takalo: Intensive monitoring of OJ 287 and 3C66A
9:15 H. Lehto: Variability in OJ 287
9:30 Z. Abraham: The periodicity in the lightcurve of OJ 287
9:45 S. Marchenko: Three methods of time series analysis of the blazars' light curves. Results for OJ 287 and BL Lac in the optical region.
10:00 D. Dultzin-Hacyan: Broad Band CCD Photometry and Spectrophotometry of OJ287 During the Minimum of 1998
10:15 P. Hughes: Extraordinary activity in the BL Lac object OJ 287

10:30 Coffee

**Multifrequency observations of BL Lacs** **Chair**

11:00 S. Wagner: Blazar activity across the electromagnetic spectrum
11:45 K. Otterbein: Monitoring the high energy branch of S5 0716+714
12:00 S. Paltani: Constraining BL Lac objects' models using structure function analysis
12:15 T. Rector: Multiwavelength observations of BL Lacs: Implications for Unification
12:30 M. Turler: Modelling the millimetre-to-radio flaring behaviour of the quasar 3C273
12:45 F. Mantovani: Short-time structural variation of 3C273

13:00 Lunch

**Emission models** **Chair**

15:00 G. Ghisellini: Emission models for BL Lac objects
15:45 N. Ikshanov: On the magnetic field configuration in the central cores of BL Lac objects
16:00 J. Kirk: The variability patterns of synchrotron emission and particle acceleration in blazars
16.15 M. Salvati: Rapid variability of gamma-ray blazars

16:30 Coffee

**Unified schemes** **Chair**

17:00 P. Padovani: BL Lacs and Unified Schemes
17:45 G. Fossati: Unifying all "flavours" of blazars
18:00 M. Georganopoulos: A viewing angle- kinetic luminosity unification scheme for BL Lacertae objects

## THURSDAY 25th

**BL Lac host galaxies** **Chair**

9:00 J. Heidt: Host galaxies and environments of BL Lac objects
9:45 S. Anton: Host galaxies of flat radio spectrum sources
10:00 G. Lamer: Near infrared observations of BL Lac hosts
10:15 T. Pursimo: Nordic Optical Telscope images of the 1 Jy BL Lac objects

10:30 Coffee

**BL Lac host galaxies (cont)** **Chair**

11:00 R. Falomo: The HST snapshot imaging of BL Lacs
11:30 A. Sillanpää: NOT and HST images of BL Lacs in comparison
11:45 J. Kotilainen: Near-infrared imaging of the host galaxies of a complete sample of flat spectrum radio quasars
12:15 K. Nilsson: High resolution imaging of TeV BL Lacs
12.30 P. Wiita: Spectral and temporal variability incorporating general relativistic effects
13.00 E. Valtaoja: Doppler boosting and orientation effects in BL Lacs and other AGN
13:30 Lunch

17:30 Conference dinner at the beach

## FRIDAY 26th

**VLBI** **Chair**

9:00 A. Marscher: The parsec-scale jets of BL Lac objects
9.45 S. Aaron: VLBI studies of Mrk 501 and 0814+425
10:00 S. Britzen: The CJF survey- first results on superluminal motion
10:15 J.-L. Gomez: A close-up look at superluminal motion: Subparsec radio observations of 3C120 and its comparison with numerical simulations

10:30 Coffee

**VLBI cont.** **Chair**

11:00 P. Charlot and H. Sol: BL Lac objects with distorted radio structure
11:30 G. Giovannini: VSOP and VLBI observations of Mrk 421 and Mrk 501
11:45 S. Qian: Possible accelerating motion of IR-mm outbursting sources in blazars
12:00 D. Gabuzda: Rapid polarization variability in 0716+714 far from the VLBI core

12:30 Lunch

**Theory** **Chair**

14:00 A. Levinson: Variability models of gamma-ray blazars
14:30 S. Komissarov: Numerical simulations of relativistic fluid jets
14:45 Y. Baryshev: AGNs as a test of relativistic gravity theory

15:00 Coffee

**New BL Lac samples** **Chair**

15:30 V. Beckmann: Evolutionary behaviour of X-ray selected BL Lac objects
16:00 S. Laurent-Muehleisen: New BL Lac samples: Searches, results and implications for Unified Schemes
16:15 A. Wolter: The REX survey: how to find a large and complete sample of BL Lacs
16:30 J. Dennet-Thorpe: The radio-optical spectra of BL Lacs and possible relatives

16:45 D. Dultzin-Hacyan: Concluding remarks