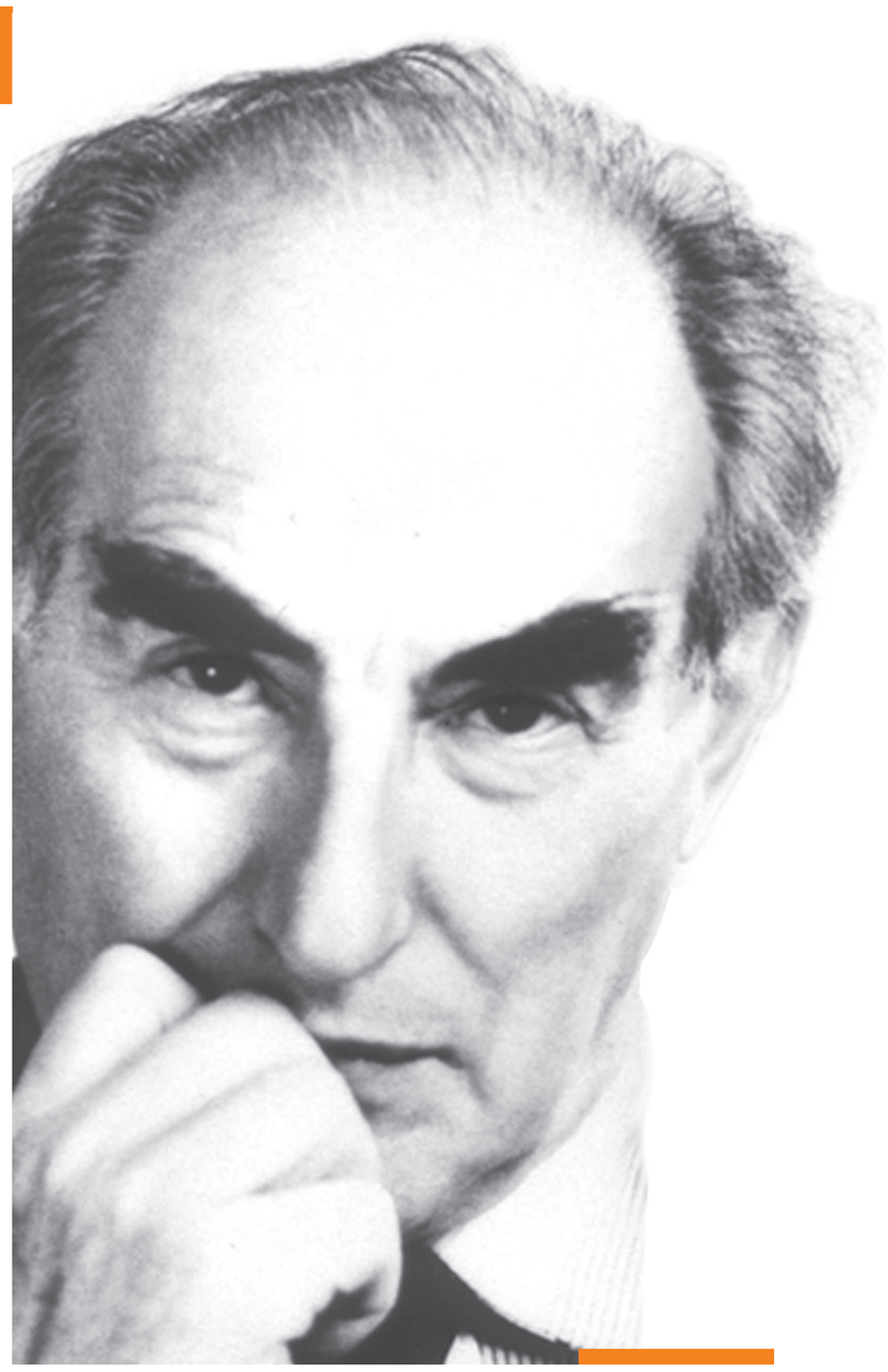
GINZBURG CONFERENCE on PHYSICS

May 28 - June 2, 2012
Lebedev Institute / Moscow



Vitaly Lazarevich Ginzburg, (born Oct. 4, 1916, Moscow, Russia - died Nov. 8, 2009, Moscow), Russian physicist and astrophysicist, who won the Nobel Prize for Physics in 2003 for his pioneering work on superconductivity. He shared the award with Alexey A. Abrikosov of Russia and Anthony J. Leggett of Great Britain. Ginzburg was also noted for his work on theories of radio-wave propagation, radio astronomy, and the origin of cosmic rays.
After graduating from Moscow State University (1938), Ginzburg was appointed to the P.N Lebedev Physical Institute of the U.S.S.R. Academy of Sciences in 1940, and from 1971 to 1988 he headed the institute's theory group.
He also taught at Gorky University (1945–68) and from 1968 at the Moscow Technical Institute of Physics. Ginzburg received the State Prize of the Soviet Union in 1953 and the Lenin Prize in 1966.
Ginzburg conducted his prizewinning research on superconductivity in the 1950s. First identified in 1911, superconductivity is the disappearance of electrical resistance in various solids when they are cooled below a characteristic temperature, which is typically very low. Scientists formulated various theories on why the phenomenon occurred in certain metals, termed type I superconductors.
Ginzburg also developed such a theory, and it proved so comprehensive that Abrikosov later used it to build a theoretical explanation for type II superconductors. Ginzburg's achievement also enabled other scientists to create and test new superconducting materials and build more powerful electromagnets.
Another significant theory developed by Ginzburg was that cosmic radiation in interstellar space is produced not by thermal radiation but by the acceleration of high-energy electron in magnetic fields, a process known as synchrotron radiation. In 1955 Ginzburg (with I.S. Shklovsky) discovered the first quantitative proof that the cosmic rays observed near the Earth originated in supernovae. Upon the discovery in 1969 of pulsars (believed to be neutron stars formed in supernova explosions), he expanded his theory to include pulsars as a related source of cosmic rays.

Organizer
Tamm Theory Department
of the Lebedev Physical Institute

Topics to be covered
- Relativistic and Plasma Astrophysics
- Strong Correlation Effects and High-Tc Superconductors
- Condensed Matter Physics
- High-Energy Physics
- Quantum Field Theory
- Superstrings, Higher-Spin Theory and AdS/CFT Duality
- Astroparticle Physics, Cosmology and Gravity Theory
- Nonlinear Dynamics

International Advisory Committee
I.Antoniadis (CERN)
I.Bozovic (Brookehaven National Lab.)
L.Brink (Chalmers Univ., Goteborg)
B.de Wit (Univ. of Utrecht)
E.Demler (Harvard Univ., Cambridge)
P.Fulde (Max Plank Inst., Dresden)
D.Gross (Kavli Inst., Santa Barbara)
I.Khalatnikov (Landau Inst., Chernogolovka)
I.Klebanov (Princeton Univ.)
A.J.Leggett (Univ. of Illinois at Urbana-Champaign)
A.Linde (Stanford Univ.)
D.Luest (Ludwig Maximilians Univ. of Munich)
J.Maldacena (Inst. for Advanced Study, Princeton)
L.McLerran (Brookehaven National Lab.)
V.Mukhanov (Ludwig Maximilians Univ. of Munich)
R.Narayan (Harvard Univ., Cambridge)
H.Nicolai (Max Plank Inst., Potsdam)
G.Nicolis (Univ. Libre de Bruxelles)
L.Pitaevskii (Kapitza Inst., Moscow, Univ. of Trento)
T.M.Rice (ETH, Zurich)
V.Ritus (Lebedev Inst., Moscow)
V.Rubakov (Inst. for Nuclear Research, Moscow)
M.Sadovskii (Inst. of Electrophysics, Ekaterinburg)
A.Sagnotti (Rome Univ. Tor Vergata & INFN, Rome)
S.Savrasov (Univ. of California, Davis)
J.Schwarz (California Inst. of Technology)
M.Scully (Texas A&M Univ.)
N.Seiberg (Inst. for Advanced Study, Princeton)
A.Slavnov (Steklov Inst., Moscow)
A.Starobinsky (Landau Inst., Chernogolovka)
K.Thorne (California Inst. of Technology)
W.Unruh (Univ. of British Columbia, Vancouver)
E.Witten (Inst. for Advanced Study, Princeton)
A.Wolfendale (Univ. of Durham)
V.Zheleznyakov (Inst. of Applied Phys., N.Novgorod)

Local Organizing Committee
L.Keldysh - Chairman
Yu.Osipov (Russian Academy of Sciences, President),
G.Mesyats (Russian Academy of Sciences,
Vice-President, Lebedev Inst., Director),
O.Ivanov - Vice-Chairman,
M.Vasiliev - Vice-Chairman,
V.Zaikin - Vice-Chairman,
B.Altshuler, P.Arseev, A.Barvinsky, V.Beskin,
Yu.Bruk, D.Chernyshov, V.Dogiel, I.Dremin,
A.Gurevich, Ya.Istomin, M.Kalenkov,
A.Leonidov, O.Loiko, S.Loiko, R.Metsaev,
V.Nechitailo, D.Nesterov, A.Polezhaev,
A.Semikhatov, O.Shaynkman, M.Soloviev,
A.Tseytlin, I.Tyutin, Yu.Uspensky,
B.Voronov, K.Zybin

On-line information: http://gc.lpi.ru

Addresses for correspondence
Lebedev Physical Institute,
53 Leninsky Prospect, Moscow, 119991 Russia
e-mail: gc@lpi.ru

Supported by
Dmitry Zimin
Dynasty Foundation

Russian Academy
of Sciences

Ministry of Education and
Science of the Russian Federation

Russian Foundation
for Basic Research

U.S. Office of Naval
Research Global

Arnold Sommerfeld
Center, LMU, Munich