

World Wide Known Centers of Scientific Research at Tomsk State Pedagogical University

Theoretical Physics

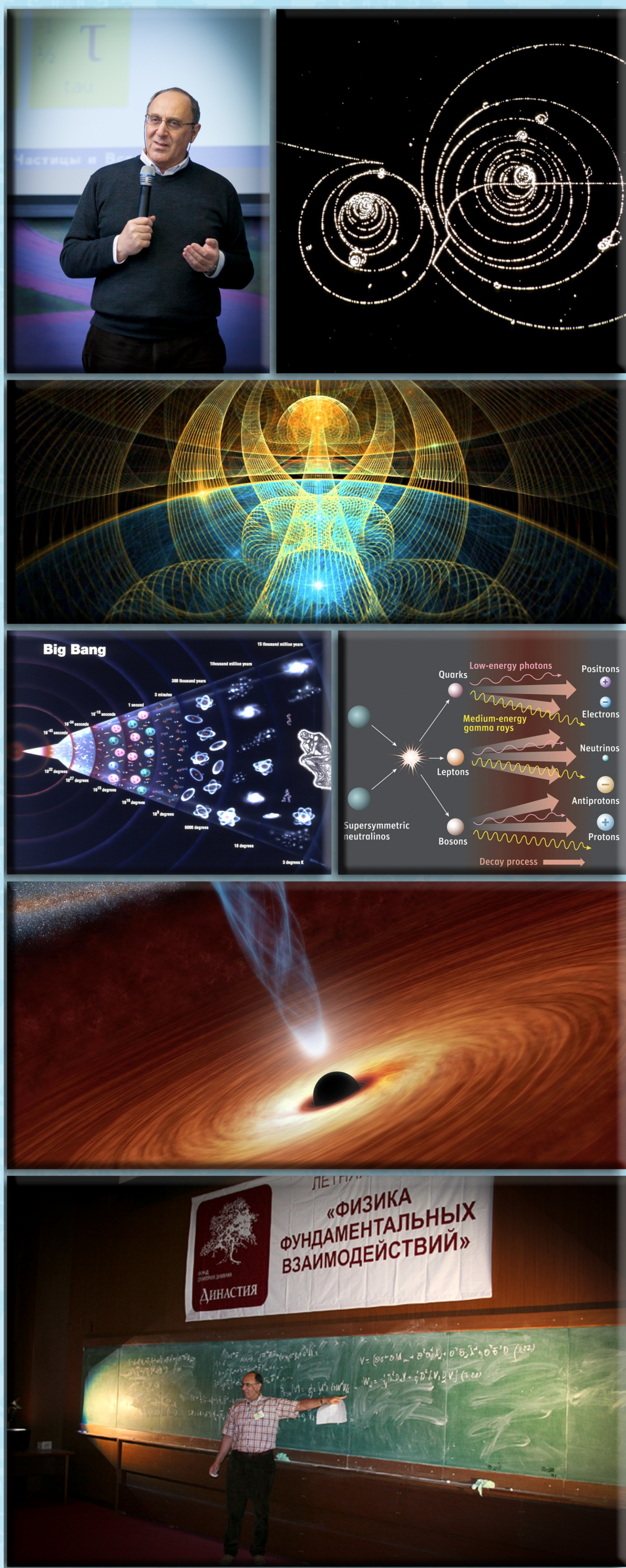
Center of Theoretical Physics at TSPU searches for highly motivated students for Master and PhD programs in theoretical physics.

Research areas:

- General Relativity and Cosmology
- Quantum Field Theory
- Supersymmetry
- Higher Spin Theory
- Radiation Theory

The Center of Theoretical Physics conducts long term research in the area of modern high energy theoretical physics. Their findings are published in top-level international journals such as Nuclear Physics, Physical Review, Physics Letters, Journal of High Energy Physics. The research group works with many progressive scientific research centers in Russia and abroad. The research group leader is Professor I.L. Buchbinder, with a total of 232 publications, 3,264 citations, and a Hirsh Index of 31.

The activity of the Theoretical Physics Center is supported by Russian and international grants.



Ecology and peat-bog systems in Western Siberia

Research areas:

- Water balance, thermal conditions, gas composition, biochemical processes and the monitoring of greenhouse gas emissions
- Research & Development of Physical and Chemical peat properties, as well as products manufactured using peat
- Siberian peat resources and its rational application.

Marshlands are vital for maintaining the natural processes which take place in our atmosphere: vegetation fills the atmosphere with oxygen and absorbs the carbon dioxide, which is then stored in peat-bogs for thousands of years. After a plant decomposes it remains in an anaerobic state and emits methane into the atmosphere. The correlation between the quantity of the carbon dioxide absorbed and the methane which is produced in the bog region has a serious effect on the global warming process.

The team of scientists conducting these studies has been awarded the status of 'Leading Scientific School within the Russian Federation.' The research team strives for new collaborations with foreign universities to further their study in the fields of science and education.

Studies in Indigenous Languages of Siberia

The Scientific School of Linguistics was founded at TSPU in the early 1940s and continues to work in the honor of its creator, Prof. A.P. Dulzon, PhD.

The main research areas are:

- ethnolinguistic and ethnographic research of Siberia's aboriginal languages and cultures
- historical, typological, anthropological, areal and sociolinguistic studies
- a unique insight into Siberia's native languages and cultures
- one of the world's largest collections of linguistic and ethnographic data on indigenous languages of Siberian
- over 90 dissertation degree projects
- a library of over 8000 units of specialized literature
- local and cooperative projects sponsored by Russian and international agencies



Everything Starts Here!