

# 2005 International Workshop/School on Physics/Detector/Accelerator at the Linear Collider

● Suggested by **Rolf-Dieter Heuer** for promoting **ILC** collaboration.

Organized by

- **Center for High Energy Physics, Tsinghua University**  
(Dept. of Physics and Dept. of Engineering Physics)
- **China Center of Advanced Science and Technology (CCAST)** directed by **T.D. Lee**

Sponsored by

- **National Natural Science Foundation of China**
- **CCAST**
- **Tsinghua University**

● SM suffers from **triviality** and **fine tuning** problems  $\implies$  **new physics beyond the SM**. Scale of new physics is expected to be  $\Lambda \sim \text{TeV}$ .

● **LHC** will start running in **2007**. May discover **new phenomena**, but not capable in making precision measurement. Need new  $e^+e^-$  linear collider.

In **2004**, **ICFA** announced to construct one linear collider in the world called **ILC** taking the superconducting techniques of **TESLA**. **ILC** studies have been very active since **2004**.

If **new physics** can be discovered at **LHC** and **ILC**, particle physics will be in a new exciting era !

● Talks at this workshop/school:

Series Lectures:

- Peter Wienemann (DESY), **Physics at the ILC**
- Roman Poeschl (DESY), **Detectors at the ILC**
- Carlo Pagani (DESY), **ILC Accelerator Techniques**
- Tao Han (U. Wisconsin), **Basic Processes in  $e^+e^-$ , etc.**  
(with a tutorial session)
- C.-P. Yuan (MSU), **Precision Collider Physics**  
(extra informal talk to students)
- Hong-Jian He (Tsinghua U.), **Higgsless Theories and Their Phenomenology**
- Tian-Jun Li (IAS, Princeton), **SUSY GUT and String Model Buildings**

## Special Topics:

- Jian-Ping Ma (ITP),  $t\bar{t}$  Production Close to Threshold at  $e^+e^-$  Linear Collider
- Mike Bisset (Tsinghua U.), SUSY Higgs at the LHC
- Shou-Hua Zhu (Peking U.),  $3\sigma$  Anomaly in  $W^+ \rightarrow \tau^+\nu_\tau$  as a Signal of New Physics

Reception: July 16th

Banquet: July 19th

Hope you enjoy the talks and your stay !

Thank You !