

# Topics of referats

For Course of lectures

« Introduction to cosmoparticle physics »

# Topics

- 1) Mirror world with  $m_n < m_p - m_e$
- 2) Mirror world with  $m_p - m_e < m_n < m_p$
- 3) Mirror world with  $m_n = m_p$
- 4) Mirror world with  $SU(2)_L \rightarrow SU(2)_{L+R}$
- 5) Mirror world with  $G'F = 2 * GF$ , accessible  $\Delta GF$  from BBN in our world?
- 6) Mirror world with  $G'F = 0.5 * GF$ , accessible  $\Delta GF$  from BBN in our world?
- 7)  $E_8 \times E'_8$
- 8) Model of Horizontal Unification – problem of low scale solution

# Topics (continued)

- 9) Model of Horizontal Unification –large scale solution
- 10) PBH
- 11) SUSY
- 12) Mirror world without weak interaction:  
 $SU(3)*U(1)$
- 13) Shadow matter with 1generation of fermions
- 14) Shadow matter with 2 generations of fermions
- 15) Shadow matter with 4 generations of fermions

## Scheme of referat

- Specify cosmologically significant consequences of physical model
- Physics of inflation, baryogenesis and candidates for dark matter
- Cosmological scenario: main stages of evolution and their physical reasons
- Conclusion about consistency of the scenario with observational data