

**The open questions, which in this workshop we are trying to answer**

# Questions

- Where do families of quarks and leptons come from? (The standard model of the electroweak and colour interaction postulates the existence of families and so do in one or another way almost all the proposals up to now. Answering this question is one of the most promising way beyond the Standard model. The Approach unifying spin and charges, do offer the answer to this open question predicting the number of families and soon also the Yukawa couplings.)
- Where do the Yukawa couplings come from? (In the standard model the Yukawa couplings are just put by hand. Can we answer this question?)
- What does determine the strength of the Yukawa couplings and accordingly the weak scale? (In the standard model the scale is put by hand. Can we say more?)

# Questions

- Why do only the left handed spinors carry the weak charge, while the right handed are weak chargeless? (This assures the mass protection mechanism in the standard model until the Higgs - by "dressing" the right handed fermions with the weak charge - destroys this protection.)
- How many families appear at (soon) observable energies? What are the properties of the heavy families, if they are stable?
- Are among the members of the families the candidates for the dark matter clusters? What are properties of such clusters?
- Where do charges come from?
- What makes the supersymmetry appearing at observable energy scale?

# Questions

- What are physical grounds for inflation, baryosynthesis, dark matter and dark energy?

All the participants in the VIA conference are very welcome to join us in answering this questions.