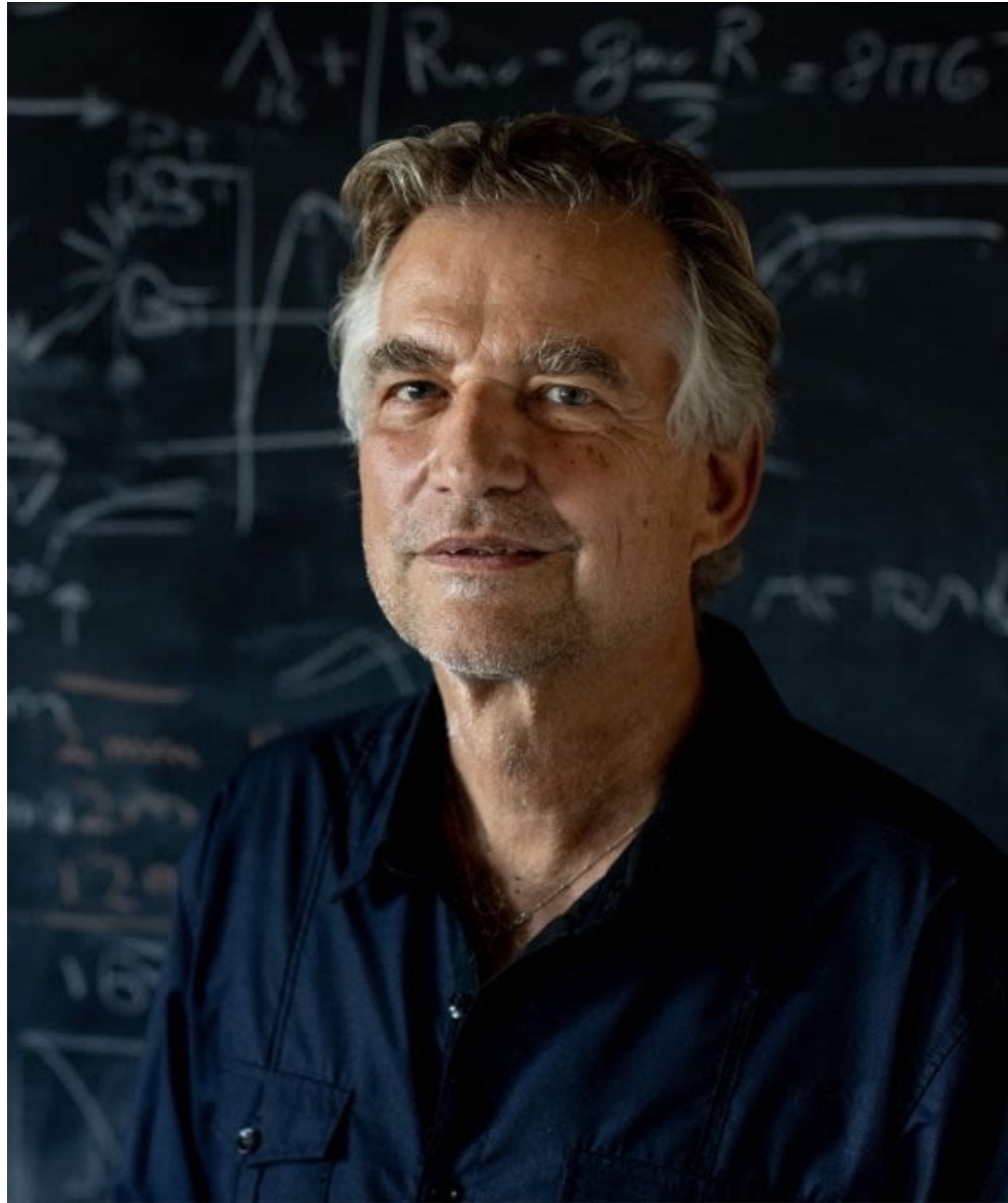


Rene Bellwied, University of Houston

MD Anderson Distinguished Professor of Physics



- Founding member of STAR
- Member of STAR, ALICE and ePIC
- Former STAR deputy spokesperson
- Former ALICE-USA Coordinator
- ePIC Institutional Board Member
- UH RHIG leader (3 professors, 3 postdocs, 11 PhD students)
- 3 students on STAR, 1 student on ePIC, 7 students on ALICE)
- Interest in hadronization and evolution of matter in the universe in general
- Studies of strange/charm particles, yield fluctuations, exotic particles, evolution from initial to final states, finite density studies

Major recent studies of interest

Interest in hadronization and evolution of matter in the universe in general.
(Studies of strange/charm particles, yield fluctuations, exotic particles, evolution from initial to final states, finite density studies)

- Quark mass dependence of hadronization through fluctuation measurements in light, strange and heavy quark sector
- Chiral symmetry restoration using hadronic strange resonances
- Strange multi-quark states searches
- Charmed baryon to meson ratios as a function of system size
- Initial quantum entanglement and the resulting final state (entropy production in a deconfined system)
- Underlying event vs. jets in high multiplicity proton-proton collisions (sphericity and flattenicity as event classifiers)
- Measuring the speed of sound at finite density

What do I expect from this workshop

- **A better understanding of the dynamical evolution from the initial to the final state of a relativistic particle collision (with special emphasis on mass and identified particle production).**
- I am not so interested in features of the QGP, I am more interested in the production of the hadronic state starting from the deconfined state of quark and gluons.

Specific questions

- Are there di-quarks in the deconfined or confined matter ?
- Can we produce a composite object without coalescence or thermalization ?
- Can we be sensitive to the difference between MPI/CR and thermal coalescence ?
- Is the system really thermal and how does fast thermalization happen ?
- What is the quark mass dependence on hadronization ?
- Is the crossover quark mass dependent, and if so, are there any significant consequences ?
- Is there room for exotic matter in dense stellar objects or elsewhere ?