Virtual Atom Smasher invites players to take part in a real High Energy Physics challenge: tuning the parameters of a theoretical model to fit experimental data from the LHC.

Players who achieve particularly good results will actually be helping scientists improve their understanding of theoretical models. The results may be used in future analysis.

On the way to achieving better agreement between theory and experiment, players are invited to explore a quantum machine, which represents all the steps involved in tuning a theoretical model.

Players can learn about the underlying physics at every step of the game, to different levels of detail. They can even contribute their own tutorials for other players to enjoy.

Virtual Atom Smasher is part of a European project to study learning and creativity in “citizen cyberscience”: online science projects for the general public. By participating, you will be helping researchers to learn how to make better citizen science games.

Students from the International Masters Classes are invited to sign up to be part of the alpha testers for this game, which will be launched in March: [https://test4theory.cern.ch/vas/](https://test4theory.cern.ch/vas/)