The world of quanta is not only fascinating, but also enables many technical applications, ranging from lasers to medical nuclear magnetic resonance imaging to future quantum computers. While our current computers are based on processing many bits (with values of 0 or 1), quantum computers are based on combining quantum bits.

A major hurdle in understanding the quantum world and the quantum technologies built upon it has been the lack of a descriptive (yet accurate) representation of its underlying mathematical description. In his talk, Prof. Dr. Steffen Glaser will use his "quantum bead game" to present a novel visual and "graspable" way of representing quantum states. This allows to illustrate the "rules of the game" of the quantum world and its peculiarities, such as the difference between bits and quantum bits, entanglement as well as the principles of quantum information processing.

After the lecture, there will be an opportunity to learn more about the quantum bead game.