## **Lectures**

- <u>The Big Bang Theory</u> (yes, the TV series but with real physics in Azores, Portugal)
- Our research on <u>Big Bang & Tsallis Statistics</u> featured on Chinese News <u>CCTV</u>
- **Physics of Unstable Nuclei** (Lectures at GSI/Darmstadt 1993/1994)

**Production of Radioactive Beams** 

**Nuclear Sizes** 

**Momentum Distributions** 

Borromean Nuclei

High Energy Scattering

**Coulomb Excitation** 

**Elastic Inelastic Scattering** 

**Pion Production** 

**Tests of Fundamental Interactions** 

Nuclear Astrophysicsp

**Fusion Reactions** 

- <u>Nuclear Physics</u> Notes (in Portuguese) Lectures by C.A. Bertulani at UFRJ/Rio de Janeiro, 1988-1990 & 1998.
- Mechanics, Thermodynamics
- Electromagnetism
- Astrophysics
- Musical Acoustics
- Lectures presented at the Galileo Galilei Institute for Theoretical Physics, Florence, Italy, March 3-7, 2014.
  - EM excitation
  - Direct Reactions
  - Reactions in the Continuum
  - Fusion & Transfer
- Indirect Methods in Nuclear astrophysics

Presented at the ChETEC-INFRA - Schools on Nuclear Astrophysics Questions (SNAQs), Europe, May 12, 2021.

- <u>Tunneling</u>, <u>Diffusion and Dissociation of Feshbach Molecules in Optical Lattices</u>
   Presented at the International Workshop on Critical Stability, October 12-17, 2014, Santos, Brazil.
- Photon-photon and photonuclear collisions at CERN

Presented at the International Workshop on photon-induced collisions at the LHC, June 2-4, 2014, CERN, Geneva, Switzerland.

• Effective Field Theory for Halo Nuclei

Presented at the International Workshop "Universality in Few-Body Systems", INT/UW, Seattle, March 10, 2014.

- <u>Searching for Pigmy Resonances</u>, Talk at the Carpathian Summer School of Physics 2016, June 26 July 9, 2016 Sinaia, Romania.
- The quest for the origins of the elements: Lec 1, Lec 2, Lec 3, Lec4
  Lectures presented at the RISP/IBS facility, The 1st RISP Intensive Program on "Rare Isotope Physics", Daejeon, Korea, July 12-22, 2016.
- <u>Nuclear Matter Incompressibility and Giant Monopole Resonances</u>
   Presented at the 27th Texas Symposium on Relativistic Astrophysics, Dallas, Texas, December 11th, 2013.

- Fusion11 Summary talk
  - A summary account of the conference "Fusion11", held in Saint Malo, France, May 2-6, 2011.
- Theory and Applications of Coulomb Excitation
  Presented at the 8th CNS-EFES Summer School, Center for Nuclear Study (CNS), the
  University of Tokyo, and RIKEN, Wako Campus, August 26 September 1, 2009.
- The Coulomb Dissociation method
   Presented at the 5th European School on Experimental Nuclear Astrophysics, Santa Tecla, Sicily, Italy, September 21-26, 2009.