Celebrating
Prof. Anton N. Antonov
In Varenna 2018
Student time in Kharkov

Master and PhD
« Minimum Landau »

- He had very good professors, as Mikhail P. Rekalo
- He met very good friends: A.P. Rekalo, G. I. Gakh, E.A. Kuraev....

....and especially Krasimira, his wife!
Professor
....teaching in Shumen and Sofia Universities

Scientific administrator
Head of the Nuclear Theory Group of INRNE, Sofia

Director of research
Supervisor of 4 PhD (at least)
...now researchers or professors

Head of international network
Collaborations with England, Spain, France, Japon, Kazakhstan, Dubna...

..about 300 publications and contributions to conferences + two monographs
TWO MONOGRAPHS

Oxford 1993

Peter E. Hodgson
Scientific achievements (see next talk !)

- **Doctor of Science** (supervisor E.V. Inopin, Kharkov, 1972)
- « Nucleon-Nucleon Correlations and Characteristics of Nuclear Structure and Nuclear Reactions ».
- « THE EXPERT » of nucleon-nucleon correlations (short-range, tensor, long-range..) that play important role in the structure of nuclei and the dynamics of nuclear reactions.
- Developed the Coherent Density Fluctuation Model (CDFM) (with I. Zh Petkov and V. A. Nikolaev) based on the delta-function approximation to the Generator Coordinate Method. The ansatz is that the One-body Density Matrix (ODM) of a finite nucleus can be expressed as an infinite superposition of ODM’s of homogeneous pieces of nuclear matter, called « fluctons », of any size. The probability of each flucton is related to the density distribution of the nucleus.
- A number of applications: spectral functions and density distributions in nuclei, including exotic and halo nuclei, form factors of light nuclei, description of the scattering of protons and neutrons on nuclei, and, more recently, electrons and (anti)neutrinos on nuclei, explaining the evidence for superscaling.
Dear colleagues,

Thank you very much for accepting our invitation to attend the scientific session in honour of the 70th Anniversary of Professor Anton N. Antonov which will be held on 23 September 2013 in the Institute for Nuclear Research and Nuclear Energy (INRNE) of the Bulgarian Academy of Sciences (BAS), Sofia, Bulgaria. The program of the session is given below. Rooms for all participants are reserved for two nights (22 and 23 September 2013) in the Hotel of the Bulgarian Academy of Sciences, 1113 Sofia, Geo Milev, 50 Shipchenski Prohod Blvd., http://www.hotel-in-bulgaria.com/en/2744/hotel-dom-na-uchenia.html

For those who still didn’t provide us with their travel schedule, we kindly ask to send this information before 13 September.

With best regards and looking forward to seeing you soon,

Dr. Mitko Gaidarov
Assoc. Professor, INRNE-BAS
On behalf of the Organizers

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**PROGRAME of the International Scientific Session in honour of the 70th Anniversary of Professor Anton N. Antonov**

23 September 2013, Hall 300
Institute of Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences
Sofia, Bulgaria

10.30 - **Opening**
10.40 - **Dimiter Tonev**-Director of INRNE-BAS
11.10 - **Carlotta Giusti** (Pavia, Italy): Correlations, Overlap Functions and One and Two-Nucleon Knockout Reactions. Studying Correlations with Anton

11.30 - **Marilena Avrigeanu** (Bucharest, Romania): Key Effective Interactions for Nuclear Reaction Mechanism Account
11.50 - **Pedro Sarriguren** (Madrid, Spain): Neutron Skins in Spherical and Deformed Nuclei from Skyrme Hartree-Fock Calculations

12.10 – 13.40 – Lunch break

13.40 - **Stelios Massen** (Thessaloniki, Greece): Application of Information Entropy to Scattering Observables and the Matter Radius of Nuclei
14.00 - **Maria Barbaro** (Torino, Italy): Exploring the Nucleus with Electrons and Neutrinos
14.20 - **Egle Tomasi-Gustafsson** (Saclay, France): Electromagnetic Form Factors: The Bridge
14.40 - **Eric Voutier** (Grenoble, France): Lepton Mass Effects in Electromagnetic Processes
15.00 - **Jose Manuel Udías** (Madrid, Spain): Nuclear Lepton-Nucleus Reactions within the Relativistic Mean-Field Model
15.20 - **Juan Antonio Caballero** (Sevilla, Spain): Interaction of Neutrinos with Nuclei: Superscaling Approach Versus Relativistic Mean Field and More
15.40 - **Vladimir Garistov** (INRNE, Sofia, Bulgaria): If Someone is Prodigy, He is Talented

16.00 - **Greetings**
19.00 – Cocktail (in the Restaurant of your Hotel)

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**Organized by Mitko Gaidarov**
International Workshop on Nuclear Theory
IWNT- Rila Mountains

June 24-30: IWNT37-2018
Dubna, Russia

“JINR- Scientific Council”
Plenipotentiary of Bulgaria
February 2010
α + d separated clusters - exchanging nucleons

Theoretical scheme: folding deuteron and $^4$He charge densities

\[ \rho_{\text{ch}}^{6\text{Li}}(\vec{r}) = \frac{3}{2} \int d\vec{r}' \rho_{\text{ch}}^{4\text{He}}(\vec{r} - \vec{r}') \rho_{\text{d}}^{\text{ch}}(\vec{r}') \]

A.N. Antonov, ..... PRC 72, (2005) 044307

History, Art, Music, Nature ...

From sea to mountains
up to Anton’s home and balcony...
Dear Anton,

It is my pleasure and privilege to congratulate You for your brilliant career and thank you for being an example. For the young generations, too.

I want to express my respect. And wish you many more ideas, good papers... and pleasant time... especially in this Varenna that you (and we all) love so much!