Your next step in Nuclear Physics: discover ECT*

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What's ECT*

A place where nuclear theory meets the world.

- International research centre in Villa Tambosi (Trento)
- Part of Fondazione Bruno Kessler
- Collaborates closely with UniTN and TIFPA-INFN

Our Mission (in one line)

We explore matter at its most fundamental level and help new scientists grow.





Why it matters for you

If you love physics but wonder "what's next?", ECT* connects:

- your master's knowledge → real research projects
- theory → experiment
- Trento → an international network

A buzzing place all year

- 22 workshops, 1 Doctoral Training Program, seminars every week
- Visitors and lecturers from all over the world
- Coffee discussions that turn into collaborations

PhD Paths starting here

Many ECT* researchers co-supervise PhD students in:

- Doctorate in Physics (UniTN)
- Doctorate in Quantum Science and Technology
- European PhD networks (Marie Curie actions etc.)

Example trajectory

Sara started her master's thesis with an ECT* mentor...

- → Joined our summer school
- → Applied to UniTN PhD
- → Now she's publishing on neutron-star physics

Training & Schools

- Octoral Training Program (June–July)
- Winter School on Quantum Machine Learning (Dec 2024)
- TALENT School on Nuclear Theory Hands-on, collaborative, international.

Workshops & Seminars

Always something happening!

You can:

- attend talks
- help with organization
- meet top scientists in person

What we study (in 60 seconds)

- Quantum Chromodynamics
- Nuclear Structure & Reactions
- Nuclear Astrophysics
- Symmetries & Fundamental Interactions
- Computational Physics
- Quantum Information

Tech side of Physics

Monte Carlo simulations, machine learning, quantum computers...

If you like coding and modelling, you'll feel at home.

Local Connections

We work shoulder-to-shoulder with:

- UniTN departments (Physics, Cognitive Science, Mathematics)
- INFN-TIFPA
- FBK labs (computing, Al)
- → shared projects and courses

European Dimension

ECT* = gateway to Europe:

Horizon Europe projects | Marie Curie fellowships | short stays abroad

Experience science as a truly global conversation.

Life at ECT*

Small groups, informal atmosphere, coffee breaks with Nobel laureates.

The villa, the garden, the mountains — great ideas need space!

Join Us!

Curious? Come visit, talk with our students, check our website.



We'll be happy to meet you — your next step might start here.