

# Tommaso Glingler

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(18/5/1996)

Dual citizenship – Italian & U.S.A.

## EDUCATION

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**Ph.D in Nuclear Engineering, University “La Sapienza” of Rome**  
(Nuclear Safety Analysis)

*Rome, Italy*  
*10/2021-ongoing*

- Preliminary safety analysis of the ITER test blanket system (ex-vessel LOCA and LOFA);
- Analyses of a hydrogen mitigation system for DEMO vacuum vessel pressure suppression system based on postulated accident scenarios;
- Optimization techniques on thermal-hydraulic and geometrical parameters of NPP safety systems;
- Development of an innovative tool to perform a dynamic probabilistic risk assessment of nuclear power plants.

**MA Nuclear/Energy Engineering, University “La Sapienza” of Rome**  
(Technologies, Power Plants and Science of Nuclear Energy)

*Rome, Italy*

Final Grade: 109/110

*09/2018 –10/2021*

- Knowledge of Nuclear Physics, Nuclear Reactor Theory, Nuclear Power Plant operations, Nuclear Measurements and Radiation Protection;
- Relevant courses: Risk Analysis, Thermal Power Plants, Fluid Dynamics and Advanced Heat and Mass Transfer;
- Basic principles of Electrical Machines and Electric Power Transmission;
- Research and investigation of the Italian Electricity market;
- Qualification on Fusion Reactor Technologies, Neutronic Design of Nuclear Systems;
- Attended Experimental Fluid Mechanics course.

**BA Energy Engineering, University “La Sapienza”**  
Final Grade: Bachelor’s Degree with 100/110

*Rome, Italy*

*09/2015 -09/2018*

- Consolidation of fundamentals engineer requirements: Physics, Calculus, Geometry;
- Knowledge of advanced energy conversion systems from renewable to coal power plants;
- Examination of heat and mass transfer physics and applications;
- Relevant courses: Fundamentals on Programming with Python language.

**Scientific High School Diploma, Amedeo Avogadro**  
Final Grade: 77/100

*Rome, Italy*

*09/2010-05/2015*

- Relevant Courses: English Literature, Italian Literature, History, Physics, Mathematics, Philosophy;

## WORK EXPERIENCE

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### Technical Area of Presales, *Atlantica Digital*

*Rome, Italy*  
*02/2019-07/2019*

- Providing support to technical consultants for the consolidation of the best ICT solution in Public Procurements;
- Research for the best fitted personnel to meet client requests;
- Analysis of the competitor's performance in public procurements;
- Composition of Technical Documentation.

### Computer Lab Assistant, *University "La Sapienza"*

*Rome, Italy*  
*01/2019-01/2020*

- Supervision of students in the computer lab during open hours;
- Update computer drivers;
- Collaboration to the mapping of Lighting strikes in Italy.

## LANGUAGES, SKILLS & INTERESTS

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- Languages:
  - Italian: Native;
  - English: Advanced;
  - Spanish: Elementary;
  - French: Attending A-2.1 course.
- IT Skills:
  - Excel: Advanced level;
  - Python: Advanced level (Succeeded at La Sapienza the Python Language course with the grade of 30/30);
  - RAVEN: Intermediate Level;
  - MELCOR: Intermediate Level.
- Interests: Watchmaking, Football, Basket, Music, Motorbike

## MAIN PUBLICATIONS

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- "Dynamic Event Tree analysis as a tool for risk assessment in nuclear fusion plants using RAVEN and MELCOR", T. Glingler et.al, IEEE Transactions on Plasma Science, November 2022
- "Thermal-hydraulic optimization of a proposed EU-DEMO hydrogen passive removal system", T. Glingler et.al, SOFT-2022, Final review in September 2022;
- "Development of a MELCOR thermal-hydraulic model for the EU-DEMO Tokamak building and LOCA simulation", T. Glingler et.al, SOFT-2022, Final review in September 2022.

## REPORT COMPOSITION

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- “MELCOR nodalization of the ITER Test Blanket System (TBS) based on the Water-Cooled Lithium Lead (WCLL) breeding blanket concept”
- “Preliminary Safety Analysis on the TBS module based on an ex-vessel Loss Of Cooling Accident (LOCA) in the TCWS”.
- “Preliminary Safety Analysis on the TBS module based on a Loss Of Flow Accident (LOFA)”
- “Measurement of drag and lift on models in wind tunnel”
- “CCGT (combined cycle gas turbine) a new way to compete in the Electricity market”
- “Propagation Model of the thermal flux in a BLEVE incident. Comparison between fireball and overpressure hazards”
- “AP-1000: First Design Calculation”
- “0-Dimensional Multigroup Criticality Calculation”
- “1-Dimensional Multigroup Flux Calculation for Hybrid Reactor”