

# Curriculum Vitae of Yassin Rany Khalil

## Dichiarazione sostitutiva di certificazione e dichiarazione sostitutiva dell'atto di notorietà

ai sensi del D.P.R. 445/28.12.2000

Il sottoscritto Yassin Rany Khalil nato a [REDACTED] consapevole delle responsabilità penali cui può andare incontro, in caso di dichiarazioni mendaci, ai sensi e per gli effetti di cui all'art. 76 del D.P.R. 445/2000 e consapevole che, ai sensi dell'art. 13 del Regolamento UE 2016/679 (GDPR), la presente dichiarazione sarà pubblicata sul sito web dell'amministrazione in apposita sezione di Amministrazione Trasparente, sotto la propria responsabilità,

**dichiara ai sensi degli artt. 46 e 47 del D.P.R. 445/2000**

### PERSONAL INFORMATION

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**Given name:** Yassin Rany

**Surname:** Khalil

**Address:** [REDACTED]

**Phone number:** [REDACTED]

**Email:** [REDACTED]

**Nationality:** [REDACTED]

**Birth date:** [REDACTED]

### RESEARCH THEMES

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The Milky Way

Stellar dynamics, Galactic potential

Galactic structure, Galactic archaeology

Galaxies: structure and evolution

### EDUCATION AND EXPERIENCE

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#### Ph.D. in Astrophysics

October 2022–September 2025

*Observatoire astronomique de Strasbourg (ObAS), Université de Strasbourg, Strasbourg, France*

*Thesis: Deciphering the dynamics of the Milky Way's bar and spiral arms with Gaia.*

Under the supervision of Benoit Famaey.

**Complementary University Diploma in “Mathematics, interactions and applications”**

*Optimal transport method for calculating distances between Milky Way's disk velocity maps.*

Part-time research project under the supervision of Laurent Navoret.

January 2024–March 2024

#### Ingénieur Polytechnicien Program

January 2018–July 2021

*École Polytechnique, Institut Polytechnique de Paris, Palaiseau, France*

Double degree in Physics and Master's Degree in Theoretical Physics and in Astronomy & Astrophysics

*Master thesis: Galaxies on the First Massive Forming Structures in the Distant Universe, CEA Saclay, France.*

Under the supervision of Emanuele Daddi.

March 2021–July 2021

*Data Analysis and Interpretation: the CMB with the Planck mission, IAS, France.*

Part-time research project under the supervision of Marian Douspis.

November 2020–January 2021

<i>Black Holes in dRGT Massive Gravity: Classification and Causal Structure, IAP, France.</i>	
Full-time research project under the supervision of Cédric Deffayet.	April 2020–August 2020
<i>Detecting Cosmic Ray Muons with Organic Scintillator Materials, LLR, France.</i>	
Part-time research project under the supervision of Alexandre Zabi.	March 2019–June 2019
<i>Applications of the Standard Model on Dark Matter Indirect Detection, Sorbonne U., France.</i>	
Part-time group research project under the supervision of Marco Cirelli.	August 2018–April 2019
<b>B.Sc. in Physics (Experimental and Theoretical Physics)</b>	February 2016–December 2017
<i>Institute of Physics, University of São Paulo, São Paulo, Brazil</i>	

## GRANTS AND AWARDS

500 000 CPU hours on Joliot Curie/Irene Rome of the Très Grand Centre de Calcul at CEA, France. (2024)  
 Ph.D. grant from the Interdisciplinary Thematic Institute in Mathematics, Interactions, and Applications (IRMIA++) of the University of Strasbourg, funded under the Excellence Initiative program. (2022-2025)  
 Scholarship from Fondation de l'École Polytechnique. (2018-2020)  
 Gold medals and honorable mention at National (Brazil, 2013-2015) and International (Indonesia, 2015) Olympiads in Chemistry and Astronomy.

## SYNERGISTIC ACTIVITIES AND RESPONSIBILITIES

Referee for MNRAS (2023-2025) and ApJ (2025).  
 Ph.D. representative for the ITI IRMIA++ committee, managing a budget of 10 k€ annually to promote activities for Ph. D. students and postdocs of the 12 research teams partner of the IRMIA++ (2023-2025).  
 LOC member, GalPhases24 International Conference, August 2024, Strasbourg.  
 SOC member, Congress of PhD Students of Ecole Doctorale 182 of Strasbourg University, March 2024.  
 LOC member, Journées de la Société Française d'Astronomie et d'Astrophysique, June 2023, Strasbourg.

## SUPERVISION

Matteo Ceppini, 1st-year engineering (equivalent B.Sc. 3), Télécom Physique Strasbourg (June–July 2025).  
 Clarisse Audabram, 1st-year engineering (equivalent B.Sc. 3), Télécom Physique Strasbourg (June–July 2025).  
 Clément Salhi, 1st-year ENS (equivalent B.Sc. 3), École Normale Supérieure Paris-Saclay (May–June 2025).  
 Romain Krieger, B.Sc. 3rd-year, Université de Strasbourg (February–May 2025).

## TALKS

09/2025 Invited Talk, Laboratoire d'Astrophysique de Bordeaux, Bordeaux, France.  
 02/2025 Invited Talk, Institute for Celestial Mechanics and Computation of Ephemerides, Paris, France.  
 01/2025 Invited Talk, Milky Way group meeting, Leibniz Institute for Astrophysics, Potsdam, Germany.  
 12/2024 Invited Talk, Milky Way group meeting, MPIA, Heidelberg, Germany.  
 11/2024 Contributed Talk, News from the dark, Marseille, France.  
 09/2024 Talk, IRMIA++ Interdisciplinary seminar, Strasbourg, France.  
 08/2024 Contributed Talk, Galphases24, Strasbourg, France.  
 06/2024 Contributed Talk, Journées de la SF2A, Marseille, France.  
 04/2024 Talk, IRMIA++ Young Researchers Cohesion Day, Strasbourg, France  
 04/2024 Talk, Astrocoffe meeting, Strasbourg, France  
 03/2024 Talk, Interdisciplinary project on Optimal transport, Strasbourg, France

06/2023 Contributed Talk, Journées de la SF2A, Strasbourg, France.  
05/2023 Talk, Astrocoffe meeting, Strasbourg, France  
03/2023 Contributed Talk, Congress of PhD Students of ED 182, Strasbourg, France.

## ATTENDANCE IN CONFERENCES, WORKSHOPS AND SCHOOLS

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09/2025 News from the Dark: dark ever?, Montpellier, France  
07/2025 European Astronomical Society Annual Meeting, Cork, Ireland  
09/2024 Waves in the Milky Way disk, online from Shanghai, China  
09/2024 News from the Dark: OM vs DM, Marseille, France  
08/2024 GalPhases24: Accretion in the Local Group, Strasbourg, France  
06/2024 Journées 2024 of the French Society of Astronomy & Astrophysics, Marseille, France  
04/2024 IRMIA++ ITI “Young Researchers” Meeting, Strasbourg, Yassin  
03/2024 Congress of PhD Students of ED 182, Strasbourg, France  
09/2023 News from the Dark: particle physics and cosmology, Brussels, Belgium  
08/2023 Summer school “Geometry and data”, Strasbourg, France  
06/2023 Journées 2023 of the French Society of Astronomy & Astrophysics, Strasbourg, France  
03/2023 Congress of PhD Students of ED 182, Strasbourg, France  
11/2019 Colloque national Action Dark Energy, Paris, France  
03/2019 COST Action CANTATA’s Cosmology Meeting, Valletta, Malta

## PUBLIC OUTREACH

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11/04/2024 Public lecture at Centre d’animation sociale et familiale, Bischwiller, France.  
06/10/2022 Article “Dynamical systems and astrophysics” for the Mathematics, interactions and applications University students’ journal.

## LANGUAGES

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English (Fluent), French (Fluent), Portuguese (Native), Spanish (Intermediate)

## OTHER PROFESSIONAL EXPERIENCE

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**Management of family business** Brazil  
*Full-time job to support my family during COVID pandemic.* July 2021–September 2022

**Company Internship in a French start-up** ActivUP, France  
*Full-time work on some identified operational missions on multiple sectors.* June 2019–August 2019