# UNIVERSITÀ DEGLI STUDI DI MILANO

**TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO**          ID CODE __6125_____

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Matematica_____**

Scientist- in – charge: __Neeman Amnon_____

**[Angel Israel Toledo Castro]**

**CURRICULUM VITAE**

## PERSONAL INFORMATION

| Surname | Toledo Castro |
|---------|---------------|
| Name | Angel Israel |

## PRESENT OCCUPATION

| Appointment | Structure |
|-------------|-----------|
| ATER (Until 09-2023) | Université Côte d'Azur |

## EDUCATION AND TRAINING

| Degree | Course of studies | University | year of achievement of the degree |
|--------|-------------------|------------|-----------------------------------|
| Degree | Mathematics | National Autonomous University of MExico | 2014 |
| Specialization | | | |
| PhD | Mathematics | Université Côte d'Azur | 2023 |
| Master | Mathematics | Universitá degli studi di Padova, Université de Bordeaux | 2016 |
| Degree of medical specialization | | | |
| Degree of European specialization | | | |

| Other | | | |
|-------|---|---|---|
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## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

| Date of registration | Association | City |
|----------------------|-------------|------|
| | | |

## FOREIGN LANGUAGES

| Languages | level of knowledge |
|-----------|--------------------|
| Spanish | Native |
| English | C1 |
| French | B2 |
| Italian | B1 |

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

| Year | Description of award |
|------|----------------------|
| 2018 | PhD Scholarship, Conacyt-French government (36 months) |
| 2022 | Guest researcher - Hausdorff Center for Mathematics (30-10-22 to 26-11-22) |
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## TRAINING OR RESEARCH ACTIVITY

From the start of my PhD studies I have been conducting research on derived categories in algebraic geometry, focusing on the interaction between Fourier-Mukai partners and Tensor triangulated geometry in the sense of Balmer. I am interested in the formal theory of triangulated categories and the homotopy theory of dg-categories.

I am broadly interested in what is known as derived non commutative algebraic geometry and my main research motivations come from understanding geometric data from derived categories and associated invariants such as SOD's, Bridgeland stability conditions, and t-structures and their possible interactions with each other.

## PROJECT ACTIVITY

| Year | Project |
|------|---------|
| | |
| | |

## PATENTS

| Patent |
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## CONGRESSES AND SEMINARS

| Date | Title | Place |
| --- | --- | --- |
| 2021 | Monoidal structures in categories of modules | University of Sonora, Mexico |
| 2022 | Balmer implies Bondal-Orlov | Hausdorff Research Institute for Mathematics, Bonn |
| 2022 | Derived, monoidal and birational | Université Côte d'Azur, Nice |
| 2023 | Deformation theory of tensor triangulated categories | ICTS, Bangalore (Online) |

## PUBLICATIONS

| Articles in reviews |
| --- |
| Toledo Castro, Angel Israe. "Tensor triangulated category structures in the derived category of a variety with big (anti-) canonical bundle." *arXiv preprint arXiv:2303.15382* (2023). **Submitted** |
| Toledo Castro, Angel Israel. "Davydov-Yetter cohomology for Tensor Triangulated Categories." *arXiv preprint arXiv:2310.03839* (2023). |
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## OTHER INFORMATION

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Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: _Mexico City, Mexico, 02-01-2024___