Doménica Corona

PhD Researcher

May 21, 1990
lilia.rivera@tecnico.ulisboa.pt
sakbecorona@gmail.com
dori.science
www.linkedin.com/in/DCoronaR
Mexican

Languages

- Spanish
- English
- Portuguese

Job Skills

- MATLAB & Simulink
- C/C++
- Git version control
- Linux administrator
- MARTe
- SIMATIC WinCC
- SIEMENS Step 7

Education

Postgraduate Training

2016 – 2020 **PhD** Instituto de Plasmas e Fusão Nuclear
APPLAuSE - Advanced Program in Plasma Science and Engineering. FCT (Foundation for Science and Technology) scholarship. Implementation of acquisition, magnetic reconstruction and control algorithms for ISTTOK tokamak.
PhD Thesis
Tokamak Magnetic Control Simulation:Applications for JT60-SA and ISTTOK Operation.

2017 – 2019 **Visiting PhD Researcher** University of Naples Federico II
Collaboration with CREATE team for the development of simulations and control tools for JT60-SA.

Studies

2009 – 2013 **Electric-Electronic Engineering** UNAM, University City
Control and Robotics specialization
Thesis Nuclear Science Institute, UNAM
Circular Cross-section Tokamak Control Position

Publications

2018 • D. Corona, N. Cruz, J.J.E. Herrera, B.B. Carvalho, H.Alves, H. Fernandes, **Design and Simulation of ISTTOK Real-Time Magnetic Multiple-Input Multiple-Output Control**, IEEE Transactions on Plasma Science ,vol. 46, Issue: 7.

2019 • D. Corona, N. Cruz, G. De Tommasi, H. Fernandes, E. Joffrin, M. Mattei, A. Mele, Y. Miyata, A. Pironti, H. Urano, T. Suzuki, F. Villone, **Plasma shape control assessment for JT-60SA using the CREATE tools**,Fusion Engineering and Design, vol. 146, pt. B, pp. 1773-1777.

2019 • D. Corona, A. Torres, E. Aymerich, B.B. Carvalho, H. Alves, H. Fernandes, **Extraction of the plasma current contribution from the numerically integrated magnetic signals in ISTTOK**, Journal of Instrumentation,Accepted.

Working Experience

2014 – 2016 **Field Services Engineer** Costumer Services Siemens México
Industrial implementations of automation systems and SCADA's.

Awards

2014 "Gabino Barreda" Medal UNAM