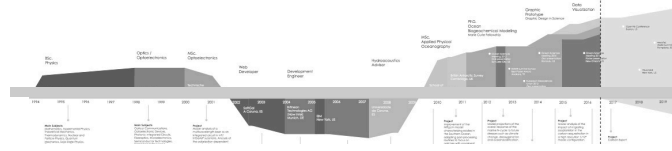


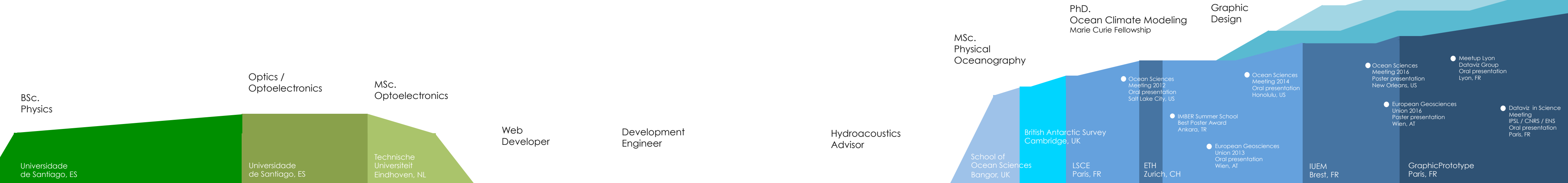
Lifemap

Jorge Martinez-Rey

Academic



Non academic



1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Main Subjects
Mathematics, Experimental Physics, Theoretical Mechanics, Nuclear and Particle Physics, Quantum Mechanics, Solid State Physics, Electromagnetism, Electronics.

Main Subjects
Optical Communications, Optoelectronic Devices, Photonic Integrated Circuits, Fiberoptics, Microelectronics, Semiconductor Technologies, Digital Signal Processing.

Project
Model analysis of a multiwavelength laser as an integrated circuit in InP/InGaAsP substrate. Analysis of the polarization dependent properties of strained quantum well materials as well as device performance in terms of threshold current, output power and thermal stability.

Tasks
Web design and software development for Human Resources projects. Accountancy software maintenance and database management.

Skills
Microsoft Office
HTML
CSS

Tasks
International coordination of experts from the areas of Design, Research & Development, Manufacturing, ChipFab Synchronization and Foundries counterparts for editing the Integrated Circuits (IC) Design Manual.

Skills
English
German

Commission
Long term delegation at IBM Microelectronics setting up an expert network as well as being involved in strategic discussions about driving features of the edge technologies on early development stage.

Project
Development of hydroacoustic systems for characterization of seabed sediments and habitats. Development of the theoretical background of acoustic physics behind models and simulations.

Main Subjects
Ocean Dynamics, Climate Change, Numerical Modeling, Tides and Waves, Estuary and Shelf Processes, ADCP, Remote Sensing

Skills
Unix / Linux
MIT gcm
MATLAB

Project
Improvement of the MITgcm model characterizing eddies in the Southern Ocean, adapting post-processing routines to focus on regional patches with prominent biological activity

Skills
Earth System Models
Cluster-based computing
CMIP5 data repositories
NetCDF format
NOAA Ferret

Project
Model projections of the overall response of the marine N-cycle to future stressors such as climate change, deoxygenation and oceanacidification.

Main Subjects
Data analysis, Air-sea interactions, Remote Sensing, Arctic climate, Nitrogen in the Earth System, Physiology of marine plants,

Skills
Mac OS X
Adobe Illustrator
Adobe InDesign
Adobe Photoshop

Project
Model analysis of the impact of migrating zooplankton in the carbon sequestration in a high resolution 1/12° model configuration.

Skills
Python
English
German
French

Dataviz Projects
Wind in the Southern Ocean
Icebergs in Antarctica
Oxygen in CMIP5 Models
Export of Organic Carbon to Depth
Dataproducts of Carbon Export
Benchmarking of CO2 markers
Impact of Climate Change in the Caribbean
Ocean Acidification in Future Climate Scenarios

Skills
D3.js javascript library
Bokeh – Python visualization library
GeoJSON & TopoJSON
HTML+CSS
Git versioning