GROUP NAME	PI	CONTACT EMAIL	DEPARTAMENT	WEB	WIND ENERGY
Advanced Control Group	Barambones, Oscar	oscar.barambones@ehu.eus	Ingeniería de Sistemas y Automática	----------	1. Design and implementation of advanced control schemes for wind turbine systems. 2. Real time validation of the new control schemes. 3. Real time control test bench design and implementation. More than 30 papers published in this topic.
EKOPOL	Barcena Hinojal, Iñaki	Inaki.barcena@ehu.eus	Ciencia Política y de la Administración	https://www.ehu.eus/es/web/ekopolhttps://ekopol.eus/es/	1. Reference project: mPOWER map existing municipal energy policy and identify innovations, best practice, as well as obstacles and barriers. (https://cordis.europa.eu/project/id/785171/es)
ITSAS REM	Blanco Ilzarbe, Jesús María	jesusmaria.blanco@ehu.eus	Ingeniería Energética	https://www.ehu.eus/es/web/itsas-rem	1. Floating wind energy 2. Wave energy (waves and currents) Facilities: Wave flume; Test bench for wind turbines; Wind tunnel
Materials + Technologies (GMT)	Eceiza, Mª Aranzazu	arantxa.eceiza@ehu.eus	Ingeniería Química y del Medio Ambiente	https://www.ehu.eus/es/web/gmt/home	1. New Sustainable Materials for application in wind energy components. 2. Development of sustainable materials of biological origin and/or highher recyclability suitable to replace some of the large amount of materials of petrochemical origin that currently make up the wind turbine blade components.
GISEL	Eguia, Pablo Zamora, Inmaculada (CoPI)	inmaculada.zamora@ehu.eus	Ingeniería Eléctrica	https://www.ehu.eus/en/web/gisel	1. Integration of wind energy in electricity systems. 2. Modeling of wind energy converters and plants for power system studies. 3. Grid forming/grid following inverters. 4.Power system dynamics with high shares of IBRs
ELEKTRIKER	Fernández Herrero, Elvira	elvira.fernandezh@ehu.eus	Ingeniería Eléctrica	----------	1. Application of the dynamic line rating to the power system congestion management. 2. Dynamic line rating monitoring sytems. 3. Dynamic line rating forecasting. 4. Simulation of the power system operation using DIgSILENT PowerFactory
Automatic Control Group	Garrido, Aitor J.	aitor.garrido@ehu.es	Ingeniería de Sistemas y Automática	https://www.ehu.eus/web/acg	1. Floating wind energy control 2. Hybrid wind-wave energy control Marine energy ACG group lab equipment: Bench consisting of wave tank and turbine simulator coupled to DFIG generator
Group of Signal and Communications	Gutiérrez, José Julio	Josejulio.gutierrez@ehu.eus	Ingenieria de Comunicaciones	https://www.ehu.eus/es/web/gsc/home	1. Signal Processing for Power Quality in Wind Turbines. This line is oriented towards the measurement and evaluation of the quality of the electrical supply of wind generators. The measurement and modeling of the influence of Rapid Voltage Changes (RVC) caused by wind turbines connection operations is studied.
Applied Electronic Research Team (APERT)	Martín González, José Luis	Joseluis.martin@ehu.eus	Tecnología Electrónica	https://www.ehu.eus/en/web/apert/start	1. Power and control circuits for Energy Converters. This research line is oriented to the design and study of power converters for electric power generation, conversion, storage and transmission. In this line, we work on power electronics and control of the power converters for different applications. We have worked on matrix converters and various aspects of power converters for renewable energy generation such as microwind generators.
MATHMODE	Pardo, David	david.pardo@ehu.eus	Matemáticas	https://www.mathmode.science/	1. Design and implementation of Deep Neural Networks DNNs for Structural Health Monitoring of Floating Offshore Wind Turbines (FOWTs) and Components (projects VIVIR; MATHEO; DEEPINVERSE, IA4TES, MATHEOLO). The optimal selection of the loss function to train a DNN when dealing with simulation and inversion problems like those appearing in structural health monitoring of offshore wind energy platforms, o the identification of several failure modes in the mooring systems and power cables of a FOWT (project VIVIR) via DNN o Develop efficient FDI and FTC strategies for the actuator and drive train of a single OWT and extension to wind energy farms. 2. Physics-informed machine learning techniques for accelerating Computational Fluid Dynamics aimed at the design of components of FOWT and harnessing wind energy.