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Ph.D. Program in Electronics, Computer Science and Electrical Engineering

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The “non-benefits” of living digitally

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Magenta Seminar Room, D Floor

Department of Electrical, Computer and Biomedical Engineering

Abstract: Nowadays, Information Technologies are part of the most intimate aspect of our personal and professional lives. While it is true that technologies provide us with numerous advantages, conveniences, and services, it is necessary to become aware of the “non-benefits” that they inherently have. Perhaps the most worrying today (from a technical point of view) is the pollution they cause, which is close to 25% of energy consumption worldwide. This energy consumption comes mainly from the data centers that support all related services, from the cloud and social networks to the IoT sensors we have in our homes. During this conference, the current situation regarding the pollution caused by Information Technologies will be highlighted and what we can do about it as scientists and as users.

Biography: Dr. Belén Bermejo is an Associate Lecturer on Computer and member of the Systems Architecture and Performance research group at the University of the Balearic Islands (Spain). Since 2016, her research has focused on the energy consumption of virtualized servers and cloud data centers. In addition, she has recently extended her research to the environmental effects of surveillance capitalism. She has numerous publications in high-impact journals and book chapters and has participated as a committee in multiple international conferences.

In addition, she is President of the Women in Engineering group of the IEEE Spain section and member of the IEEE Spain board. She has also carried out research stays at the University of Newcastle (United Kingdom), the University of Seville (Spain), and the University of Pavia (Italy). She has been part of numerous national, international, and European research projects throughout her career, being responsible for two cooperation projects with Latin America.

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