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NOTA DE PRENSA

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## Fue difícil elegir entre la belleza clásica de las matemáticas y la perspectiva futurista de los ordenadores y la comunicación

Entrevista a Darek Kowalski, *Investigador Visitante*, Institute IMDEA Networks



*Darek Kowalski*  
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1. Para empezar esta entrevista, nos gustaría conocer cómo nació su vocación científica ¿Cuándo y por qué decidió que quería ser científico?

This is not an easy question to answer. I had always been curious of how the world is built and how things work, but a particular decision of becoming a scientist came late, probably during the fourth year of my study of mathematics. At that point I realized I could not only enjoy solving mathematical puzzles, but also contribute to the common knowledge by challenging open problems. Another revelation came one year after when I decided to start my PhD in Computer Science. It was a difficult choice between the classical beauty of mathematics and a futuristic perspective of computers and communication, but after a few months of struggle the “modern” part of my nature took over.

2. ¿Cuál es su formación y trayectoria como investigador? ¿A qué instituciones ha estado vinculado hasta ahora?



Although my first love of pure mathematics has never truly ended, for the last 15 years I have been developing my skills mostly in the area of algorithms and combinatorial analysis.

During my PhD studies I focused on distributed collaboration protocols and fault-tolerance. Later on, during my postdoctoral visits, my research expertise was extended to wireless communication algorithms and their rigorous analysis. Since then I also worked, mostly in collaboration with other researchers, on many other topics related to algorithms and discrete mathematics, such as approximation and online algorithms, quantum protocols, graph algorithms, combinatorial group testing, privacy and security.



**3. ¿En qué circunstancias surgió la posibilidad de venir a trabajar a Madrid?**

I heard about IMDEA Networks a few years ago, and since then I have observed how the institute grows. About a year ago I decided to apply for a Visiting Researcher position, and my application was successful. I am affiliated with the University of Liverpool, UK, where I hold a reader position in the Department of Computer Science. Prior to moving to Liverpool, I was a postdoctoral researcher at the Max-Planck Institute for Computer Science (Germany), at the University of Connecticut (USA) and at the University of Quebec (Canada).

**4. ¿Qué es lo que más le ha interesado del proyecto IMDEA y qué determinó su incorporación?**

What is exceptional about the IMDEA institutes, and in particular about IMDEA Networks, is their environment, where a number of researchers from the different institutes, other Madrid universities and from abroad, with different backgrounds and experience, interact successfully in order to make progress on some frontier problems. The amount of researchers, collaborators, visitors and projects creates a critical mass, which is necessary for innovation and the discovery of new, original ideas. From my personal perspective, it is an excellent place to participate in challenging projects, gather new experience in different sub-areas of network communication, and contribute to the currently run projects.



5. ¿En qué líneas de investigación va a trabajar y qué resultados concretos espera alcanzar?

My main working topics at IMDEA Networks are wireless communication, reliability and energy efficiency; however, I am very interested in collaborating on other



pioneering work that could benefit from my background and experience. In particular, my plans include improving protocols for resolving conflicts in accessing common communication channels or other joined resources, as well as incorporating efficient energy-saving mechanisms into existing and new network protocols.

6. ¿Conocía España antes de su incorporación a IMDEA? ¿Qué es lo que más le gusta de Madrid?

Prior to joining IMDEA Networks I visited Spain twice, each time for a short period. Therefore, my knowledge of Spain was limited to what I had read from books, newspapers and what I had heard from my Spanish colleagues. It occurred however that this theoretical knowledge I gathered before is very close to what I have found here; this includes sunny and dry climate, tasty Spanish cuisine, rich culture and specific social life and customs. It is a big change for me after spending the last ten years in traditional Anglo-Saxon countries, and I really enjoy it.

To be honest, I have not had enough time to get familiar with Madrid yet. I have a long list of places to visit, taken from the internet and my colleagues, but so far I succeeded to see only Parque de Retiro, part of Madrid around Puerta del Sol, and the zoo. All these places are really great, offering a lot of attractions for visitors. What I will have to get used to, after ten peaceful years, is the number of people around, especially in popular public places, and the noise. I am looking forward to further exploration of Madrid and other interesting places in Spain.

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## **SOBRE INSTITUTE IMDEA NETWORKS**

Institute IMDEA Networks es un Instituto de investigación respaldado por el Gobierno de la Comunidad de Madrid y por la Unión Europea. El Instituto atrae a distinguidos y jóvenes investigadores científicos de todo el mundo con el fin de desarrollar ciencia y tecnología punta en el campo de las redes. Para asegurarse una perspectiva auténticamente internacional, el lenguaje de trabajo del Instituto es el inglés. Al promover la colaboración interdisciplinaria, el Instituto, establecido en Madrid, trabaja en sociedad con empresas y científicos líderes de todo el mundo. Sus actividades generan nuevo saber y conocimientos, con los que el Instituto apoya el continuo desarrollo de Madrid y de España como centros de referencia internacional para la investigación científica y tecnológica.

[www.networks.imdea.org](http://www.networks.imdea.org)

## **INFORMACIÓN DE CONTACTO - CON PROPÓSITOS MERAMENTE INFORMATIVOS**

Amablemente solicitamos que no publique los siguientes datos de contacto. Gracias por su cooperación.

Si desea más información sobre este particular, por favor, contacte con:

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