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Marcus du Sautoy



Alexander Grothendieck

De favoriet van Marcus du Sautoy

Alexander Grothendieck

Elke maand vragen Jeanine Daems en Ionica Smeets op hun weblog www.wiskundemeisjes.nl aan een bekende wiskundige wie zijn favoriete nog levende wiskundige is. Hiermee willen ze bijzondere wiskundigen van deze tijd eens in het zonnetje zetten. In elke Nieuw Archief voor Wiskunde een bladzijde over zo'n favoriet en zijn werk. Deze keer vragen ze Marcus du Sautoy per email wie hij bewondert.

Du Sautoy werkt aan zèta-functies, maar hij is vooral bekend door zijn activiteiten náást zijn onderzoek. Hij schreef *The music of the primes* en *Finding moonshine*, twee succesvolle populair-wetenschappelijke boeken over zuivere wiskunde. Hij maakt programma's over wiskunde voor de BBC en was de derde wiskundige die een Royal Institution Christmas Lecture mocht geven.

Wij trokken de stoute schoenen aan en stuurden Du Sautoy een email met een lijst vragen over zijn favoriete (nog levende!) wiskundige. Du Sautoy vertelt in zijn prachtige Engels (dat we dus niet vertalen) waarom hij Alexander Grothendieck kiest:

"He created a new language to be able to gain new insights into how to solve equations. Solving equations has been a major theme in mathematics ever since the Ancient Babylonians started solving the first quadratic equations. But some equations have proved very difficult to unlock. For example the equations at the heart of Fermat's Last Theorem remained enigmatic for centuries. It was only with the developments of techniques of Grothendieck and other French mathematicians

that we have finally got the tools to solve such problems.

Grothendieck is a master of seeing structure where others before could only see a mess. It is a very abstract language that he has produced and many mathematicians are still battling to master its grammar. But everyone knows that mathematics changed after Grothendieck's contribution."

Have you ever worked together? "In a dramatic gesture Grothendieck left mathematics in 1970 in his early 40s. He turned instead to politics. He turns 80 this year. So unfortunately I am too young to have worked with him which is a shame. His mathematical seminars at IHES in Paris are the stuff of legend. He was an incredibly charismatic mathematician. A mathematical prophet."

What kind of person is he? "Grothendieck is an extremely complicated personality. His mathematics is extremely abstract and tough. He had an incredibly difficult childhood which you can read about in the last chapter of *The music of the primes*. The way he abandoned mathematics for politics upset many people. He currently lives the life of a hermit, hiding in the Pyrenees. It is said that he has gone crazy in later life and is starving himself to death."

Do you know a nice story about him? "Grothendieck decided that teaching algebraic geometry in the jungles around Hanoi was the best way to protest against the Vietnam War. Not sure what the locals made of his incredibly abstract mathematics."

