

## Creative Souls on (famous) Creative Souls

### 1. **Michael Atiyah (Fields Medal, Abel Prize) on Edward Witten -**

Although he is definitely a physicist (as his list of publications clearly shows) his command of mathematics is rivaled by few mathematicians, and his ability to interpret physical ideas in mathematical form is quite unique. Time and again he has surprised the mathematical community by a brilliant application of physical insight leading to new and deep mathematical theorems... He has made a profound impact on contemporary mathematics. In his hands physics is once again providing a rich source of inspiration and insight in mathematics.

### 2. **Charles Fefferman (Fields Medal) on Terence Tao -**

Such is Tao's reputation that mathematicians now compete to interest him in their problems, and he is becoming a kind of Mr Fix-it for frustrated researchers. "If you're stuck on a problem, then one way out is to interest Terence Tao.

### 3. **Timothy Gowers (Fields Medal) on Terence Tao -**

Tao's mathematical knowledge has an extraordinary combination of breadth and depth: he can write confidently and authoritatively on topics as diverse as partial differential equations, analytic number theory, the geometry of 3-manifolds, nonstandard analysis, group theory, model theory, quantum mechanics, probability, ergodic theory, combinatorics, harmonic analysis, image processing, functional analysis, and many others. Some of these are areas to which he has made fundamental contributions. Others are areas that he appears to understand at the deep intuitive level of an expert despite officially not working in those areas. How he does all this, as well as writing papers and books at a prodigious rate, is a complete mystery. It has been said that Hilbert was the last person to know all of mathematics, but it is not easy to find gaps in Tao's knowledge, and if you do then you may well find that the gaps have been filled a year later.

### 4. **John Tate (Abel Prize) and David Mumford (Fields Medal) on Alexander Grothendieck -**

Although mathematics became more and more abstract and general throughout the 20th century, it was Alexander Grothendieck who was the greatest master of this trend. His unique skill was to eliminate all unnecessary hypotheses and burrow into an area so deeply that its inner patterns on the most abstract level revealed themselves—and then, like a magician, show how the solution of old problems fell out in straightforward ways now that their real nature had been revealed.

### 5. **An anonymous person on Richard Feynman -**

I do not know—but I believe that Richard Feynman is either a Communist or very strongly pro-Communist—and as such a very definite security risk. This man is, in my opinion, an extremely complex and dangerous person, a very dangerous person to have in a position of public trust ... In matters of intrigue Richard Feynman is, I believe immensely clever—indeed a genius—and he is, I further believe, completely ruthless, unhampered by morals, ethics, or religion—and will stop at absolutely nothing to achieve his ends.

### 6. **Eugene Wigner (Nobel Prize) on von-Neumann -**

Only he was fully awake.

### 7. **Eugene Wigner on Einstein -**

Einstein's understanding was deeper even than von Neumann's. His mind was both more penetrating and more original than von Neumann's. And that is a very remarkable statement.