Weapon of maths instruction in War on Terror

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A mathematician at Stanford University is waging war on terrorists - using algebra to help unravel al-Qaeda networks, writes Anna Fazackerley.

Jonathan Farley, a science fellow at Stanford's Centre for International Security and Co-operation, has shown that lattice theory, which is based on order that includes Boolean algebra, could be used to assess more accurately vulnerability to terrorist attack.

Dr Farley argued that in using traditional models experts could overestimate their success at disrupting a terrorist cell.

He said: "I could see that they were overlooking hierarchy. Lattice theory is like looking at an organisational chart. Terrorist cells have chains of command so you need to consider whether a plan formulated by a leader can work its way down to a foot soldier who will carry it out."

Dr Farley is using the model to determine the structure of the perfect terrorist cell - a cell where the most people can be removed with the least disruption.

But the mathematician is more interested in elevating an oft-overlooked "beautiful theory" than in promoting the Bush Administration's War on Terror.

He said: "I'm against the War on Terror, but what we are suggesting isn't going to hurt anybody. We aren't going to capture Bin Laden using maths, but we are helping decision-makers to make better decisions."

He added: "Unfortunately there isn't as much support for moving in the ethereal realms as there should be, whereas in the US everyone is concerned about al-Qaeda blowing them up."