

Slime mold mimics Canadian highway network (w/ video)

March 26 2012

Queen's University professor Selim Akl has provided additional proof to the theory that nature computes.

Dr. Akl (School of Computing) placed rolled oats on a map of Canada, covering the major [urban areas](#). One urban area held the [slime mold](#). The slime mold reached out for the food, creating thin tubes that eventually formed a network mirroring the Canadian highway system.

"By showing species as low as slime mold can compute a network as complex as the Canadian highway system, we were able to provide some evidence that nature computes," says Dr. Akl.

Moving forward, Dr. Akl would like to collect more examples to support his claim that nature computes. He explains, for example, that the leaf of a plant uses 99 per cent of the light it receives from the sun while the best engineered [solar cells](#) have an [efficiency](#) of only 35 per cent. Research into this area could lead to important practical applications.

Dr. Akl's study, co-authored by Andrew Adamatzky (University of the West of England, United Kingdom) is being published in the *International Journal of Natural Computing Research*.

Provided by Queen's University

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