

THE GREAT STALACPIPE ORGAN

CAVES are disorientating at the best of times, especially ones as baroque as Luray caverns, deep beneath Virginia's Shenandoah valley. But as you descend underground, past Titania's Veil (a gleaming white calcite formation), crossing Giant's Hall and skirting the mirror surface of Dream Lake, you will hear an ethereal music start to fill the dripping hush. Soon it feels as if you are standing inside a marimba made of stone, in a setting designed by Salvador Dalí. The songs seem to come from all around, as if the cavern itself were singing.

You have found the Great Stalacpipe Organ, a unique instrument that uses cave formations to make music. Conceived and built in the 1950s by mathematician Leland

Sprinkle, the organ produces tones using rubber-tipped mallets to strike stalactites as its keys are played. It took Sprinkle three years and 2500 tries to find the right 37 formations to serve as natural chimes, ranging over five octaves.

The result is the world's largest natural instrument, covering 1.4 hectares and using over 8 kilometres of wiring. It's played daily through an automated system, and by an organist during the half-dozen or so weddings held there every year. Julian Smith

WHERE: Luray, Virginia, 90 minutes' drive west of Washington DC

WHEN: Open daily



BARBARA WIEBEL

You can get married to the sounds of the stalacpipe organ

SOUDAN MINE

SEVEN hundred metres below the mountainous terrain of Soudan, Minnesota, lurks part of one of the most important experiments in particle physics. A unique box of tricks designed to detect neutrinos beamed from Fermilab, about 725 kilometres away in Batavia, Illinois, is buried here. This sensitive experiment is sited deep down in this old iron mine to shield it from the "noise" of cosmic rays raining down on the Earth.



Neutrino physics inspired Gianetti's massive mural

