



Pacific Institute *for the*
Mathematical Sciences

PIMS - UVIC PUBLIC LECTURE

GERTA KELLER

Wednesday, July 24, 2019

6:00 pm

Bob Wright Centre, Room B150

University of Victoria

DINOSAUR WARS: EXTINCTION BY ASTEROID OR VOLCANISM?

ARE WE THE DINOSAURS OF THE 6TH MASS EXTINCTION?



Gerta Keller

Professor of Paleontology

Princeton University

Prof. Gerta Keller's major research and discoveries ranged from climate change and its effects on ocean circulation, ocean anoxic events, polar warming, Deccan volcanism, comet showers, extraterrestrial impacts, the dinosaur mass extinction, the age of the Chicxulub impact and the 6th mass extinction. Her research frequently challenged accepted scientific dogma and placed her at the center of acrimonious debates fighting for survival of truth-based evidence. All but the cause of the Chicxulub impact were soon accepted by scientists and integrated into new research. After

four decades, impact proponents still fiercely defend the impact theory, deny contrary evidence and at best incorporate volcanism as ad hoc revisions, proclaiming the impact triggered volcanism that caused the mass extinction.

Abstract

For the past 40 years the demise of the dinosaurs has been attributed to an asteroid impact on Yucatan, a theory that is imaginative, popular and even sexy. From the very beginning, scientists who doubted this theory were threatened into silence or their careers destroyed by the main theory proponents. Thus began the Dinosaur wars in 1980 – and still continuing. As in any war, there are two sides to the Dinosaur wars. The majority believes an asteroid hit Yucatan and instantaneously wiped out 75% of all life including the dinosaurs in a global firestorm and nuclear type winter. A small minority tested this theory and found contrary evidence that supported Deccan volcanism in India that caused rapid climate warming due to greenhouse gases (CO₂), environmental stress, acid rain and ocean acidification culminating in the mass extinctions. This lecture highlights the four decades of the dinosaur wars, the increasing acceptance of volcanism's catastrophic effects and likely cause of the mass extinction and the resulting ad hoc revisions to accommodate the impact theory.

MORE DETAILS: [HTTPS://WWW.PIMS.MATH.CA/SCIENTIFIC-EVENT/190724-PUPLGK](https://www.pims.math.ca/scientific-event/190724-puPLGK)



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