Bryce DeWitt

 $PROFESSOR \ of \ PHYSICS \ (Deceased)$

University of Texas, Austin

Email Correspondence

January 17, 1996

PREFACE

De Witt (who died in 2004) had an illustrious career that spanned a wide variety of physics issues.

Unfortunately, though conversant with popular *theories* of gravity, DeWitt was not very curious about *gravity itself*. He thought he already understood it well enough to poo poo the idea of doing Galileo's exeriment with a modified Cavendish balance.

So it goes.

NOTE: The initial outgoing message to DeWitt was the same as the one sent to Marc Davis (enclosed) a couple weeks earlier. All that's left of the exchange is DeWitt's two-sentence response.

Bryce DeWitt,1/17/96 11:00 AM,Gravity experiment From: dewitt@lifshitz.ph.utexas.edu (Bryce DeWitt) Date: Wed, 17 Jan 1996 14:00:36 CST To: RJBENISH@TELEPORT.COM Subject: Gravity experiment

Dear Mr. Benish, The experiment you mention has never been done. It might be doable on an asteroid, but the money could be much better spent on other things. Bryce DeWitt

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Printed for rjbenish@teleport.com (Richard Benish)

WIKIPEDIA

Bryce DeWitt

Bryce Seligman DeWitt (January 8, 1923 – September 23, 2004) was an American <u>theoretical physicist</u> who studied <u>gravity</u> and <u>field</u> theories.

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Life

He was born **Carl Bryce Seligman** but he and his three brothers added "DeWitt" from their mother's side of the family, at the urging of their father in 1950, after Bryce experienced <u>anti-semitism</u> as a "budding young scientist in Europe" (Seligman is a Jewish name; ethnically Bryce is part Jewish).^[1] This is similar to <u>Spanish naming</u> <u>customs</u>, where a person bears two surnames, one being from their father and the other from their mother. Twenty years later this change of name is rumored to have so angered <u>Felix Bloch</u> that he blocked DeWitt's appointment to <u>Stanford University</u> and DeWitt instead moved to Austin, Texas.^[2] He served in <u>World War II</u> as a naval aviator. He was married to mathematical physicist <u>Cécile</u> <u>DeWitt-Morette</u>. He died September 23, 2004 from <u>pancreatic</u> <u>cancer</u> at the age of 81. He is buried in France, and was survived by his four daughters.

Work

He approached the quantization of general relativity, in particular, developed <u>canonical quantum gravity</u> and manifestly covariant methods that use the <u>heat kernel</u>. B. DeWitt formulated the <u>Wheeler–DeWitt equation</u> for the <u>wavefunction</u> of the <u>Universe</u> with <u>John Archibald Wheeler</u> and advanced the formulation of <u>Hugh</u> <u>Everett's many-worlds interpretation</u> of quantum mechanics. With his student <u>Larry Smarr</u> he originated the field of <u>numerical</u> relativity.

Bryce DeWitt	
Bryce (right) and Cécile (left)	
Born	Carl Bryce Seligman January 8, 1923 Dinuba, California
Died	September 23, 2004 (aged 81) Austin, Texas
Residence	United States
Nationality	American
Alma mater	Harvard University
Known for	DeWitt notation
Spouse(s)	Cécile DeWitt-Morette
Awards	Dirac Prize (1987) Pomeranchuk Prize (2002) Einstein Prize (2005)
	Scientific career
Fields	Theoretical physicist
Institutions	Institute for Advanced Study University of North Carolina at Chapel Hill University of Texas at Austin
Doctoral advisor	Julian Schwinger
Doctoral students	Donald Marolf

He received his bachelor's in 1943, master's in 1947 and doctoral degrees from <u>Harvard University</u> in 1950. His Ph.D. supervisor was Julian S. Schwinger. Afterwards he worked at the <u>Institute for Advanced Study</u>, the <u>University of North</u> Carolina at Chapel Hill and the <u>University of Texas at Austin</u>. From 1953 to 1956 DeWitt was at the <u>Lawrence Livermore</u> <u>National Laboratory</u>. 1955 he earned the price "for the best two thousand word essays on the possibilities of discovering some partial insulator, reflector or absorber of gravity waves" by writing a "this is stupid" essay in one night. It finally led into the first "GR" conference at Chapel Hill 1957.