

Meeting

near high peaks:

Les Houches, Aspen, ...

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BHs in Les Houches 1972

From Wikipedia, the free encyclopedia

Coordinates:  45.8989°N 6.7701°E

Les Houches School of Physics (**French**: *École de physique des Houches*) is an international physics center dedicated to seasonal schools and workshops. It is located in [Les Houches](#), France. The school was founded in 1951 by French scientist [Cécile DeWitt-Morette](#).^[1]

Between its participants there have been famous [Nobel laureates in Physics](#) like [Enrico Fermi](#), [Wolfgang Pauli](#), [Murray Gell-Mann](#) and [John Bardeen](#) amongst others.^[1] According to former director of the school, [Jean Zinn-Justin](#), the school is the "mother of all modern schools of physics".^[1]

Since 2017, it is a Joint Research Service (**French**: *Unité mixte de service*, UMS) of the [French National Centre for Scientific Research](#) (CNRS) and the [Grenoble Alpes University](#).^[2] In 2020, it was recognized as a EPS Historic Site by the [European Physical Society](#) (EPS).^[1]



Summer, 1972, discussion in main lecture hall. From left, [Yuval Ne'eman](#), [Bryce DeWitt](#), [Kip Thorne](#), [Demetrios Christodoulou](#). 

History [[edit](#)]

The school was founded by [Cécile DeWitt-Morette](#) in 1951. She was 29 years old at the time, had married physicist [Bryce DeWitt](#) a week before, and was still a [postdoctoral researcher](#) in the United States.^[3] The school was created as a post-[World War II](#) effort to improve the standard of [modern physics](#) in Europe, which was lagging behind the United States.^[1] She was inspired by her experience in the [Girl Scouts](#) and 1949 [Richard Feynman](#)'s Ann Arbor annual Summer Symposium, at the [University of Michigan](#), which DeWitt-Morette attended.^[3]

BHs in Les Houches 1972

CONTENTS

Contributors	vi
Preface (English)	vii
Préface (Français)	ix
List of Participants	xi
S. W. HAWKING: The Event Horizon	1
B. CARTER: Black Hole Equilibrium States	57
J. M. BARDEEN: Timelike and Null Geodesics in the Kerr Metric.	215
J. M. BARDEEN: Rapidly Rotating Stars, Disks, and Black Holes	241
H. GURSKY: Observations of Galactic X-ray Sources	291
I. D. NOVIKOV and K. S. THORNE: Black Hole Astrophysics	343
R. RUFFINI: On the Energetics of Black Holes	451
Table of Contents	547

Les Houches, Août 1972
Cours de l'Ecole d'été de Physique théorique-
Organe d'intérêt commun de l'U.S.M.G.
et I.N.P.G. subventionné par l'OTAN et
le Commissariat à l'Energie Atomique

BLACK HOLES LES ASTRES OCCLUS

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GORDON AND BREACH SCIENCE PUBLISHERS
New York London Paris

BHs in Prague 2025

Kip Thorne: Quantum Fluctuations in our Universe's Warped Side (Jiří Bičák Memorial Conference 2025)



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Coordinates:  39°11′53″N 106°49′44″W﻿ / ﻿

The Aspen Center for Physics (ACP) is a non-profit institution for physics research located in [Aspen, Colorado](#), in the [Rocky Mountains](#) region of the United States. Since its foundation in 1962, it has hosted distinguished physicists for short-term visits during seasonal winter and summer programs, to promote collaborative research in fields including astrophysics, cosmology, condensed matter physics, string theory, quantum physics, biophysics, and more.^{[1][2]}

To date, sixty-six of the center's affiliates have won [Nobel Prizes in Physics](#) and three have won [Fields Medals](#) in mathematics. Its affiliates have garnered a wide array of other national and international distinctions, among them the [Abel Prize](#), the [Dirac Medal](#), the [Guggenheim Fellowship](#), the [MacArthur Prize](#), and the [Breakthrough Prize](#).^[3]^[4]^[5]^[6]^[7] Its visitors have included figures such as the cosmologist and gravitational theorist [Stephen Hawking](#), the particle physicist [Murray Gell-Mann](#), the condensed matter theorist [Philip W. Anderson](#), and the former Prime Minister of the United Kingdom, [Margaret Thatcher](#).^[8]^[9]^[10]^[11]

In addition to serving as a locus for physics research, the ACP's mission has entailed public outreach: offering programs to educate the general public about physics and to stimulate interest in the subject among youth.^[12]^[13]

Aspen Center for Physics



Founders	George Stranahan Michael Cohen (physicist) Robert Craig
Established	1962
Focus	Physics
President	Matthias Troyer
Address	700 Gillespie Ave, Aspen, CO 81611, USA
Location	Aspen, Colorado, United States
Website	aspenphys.org 

Aspen Center for Physics



Prague RAG meetings in Alps

Prague Relativistic Astrophysics

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IN CZECH

MEETINGS ORGANISED BY THE GROUP

Annual meetings of Prague Relativistic Astrophysics Group

- [2023](#) (Hüben, Ötztal, Austria, 22–29 July 2023)
- [2021](#) (Taxenbach, Austria, 14–21 July 2021)
- [2020](#) (Höf, St. Michael/Lungau, Austria, 25 July–01 August 2020)
- [2018](#) (Mittersill, Austria, 23–30 June 2018)
- [2016](#) (Bramberg am Wildkogel, Austria, 11–18 June 2016)
- [2014](#) (Mandling, Austria, 19–26 July 2014)
- [2012](#) (Heiligenblut, Austria, 11–18 August 2012)
- [2011](#) (Ginzling, Austria, 6–13 August 2011)
- [2010](#) (Gargellen, Austria, 14–21 August 2010)
- [2009](#) (Leogang, Austria, 14–21 June 2009)
- [2008](#) (Fügen, Austria, 23–30 August 2008)

Texas Symposium on Relativistic Astrophysics

Since 1978, the Texas Symposium has the tradition of moving around the globe and taking place at various cities. In December 2021,

Prague RAG meetings in Alps



Thank you!

Some historical remarks

John Michell (1784): *Phil. Trans. Roy. Soc. Lond.*, LXXIV, 35

If there should really exist in nature any bodies whose density is not less than that of the sun, and whose diameters are more than 500 times the diameter of the sun, since their light could not arrive at us . . . we could have no information from sight; yet if any other luminous bodies should happen to revolve about them we might still perhaps from the motions of these revolving bodies infer the existence of the central ones. . .

Pierre S. Laplace (1796): *“Exposition du Système du Monde”*

. . . the attractive force of a heavenly body could be so large that light could not flow out of it.

Some historical remarks

SCIENCE NEWS LETTER *for January 18, 1964*

ASTRONOMY

"Black Holes" in Space

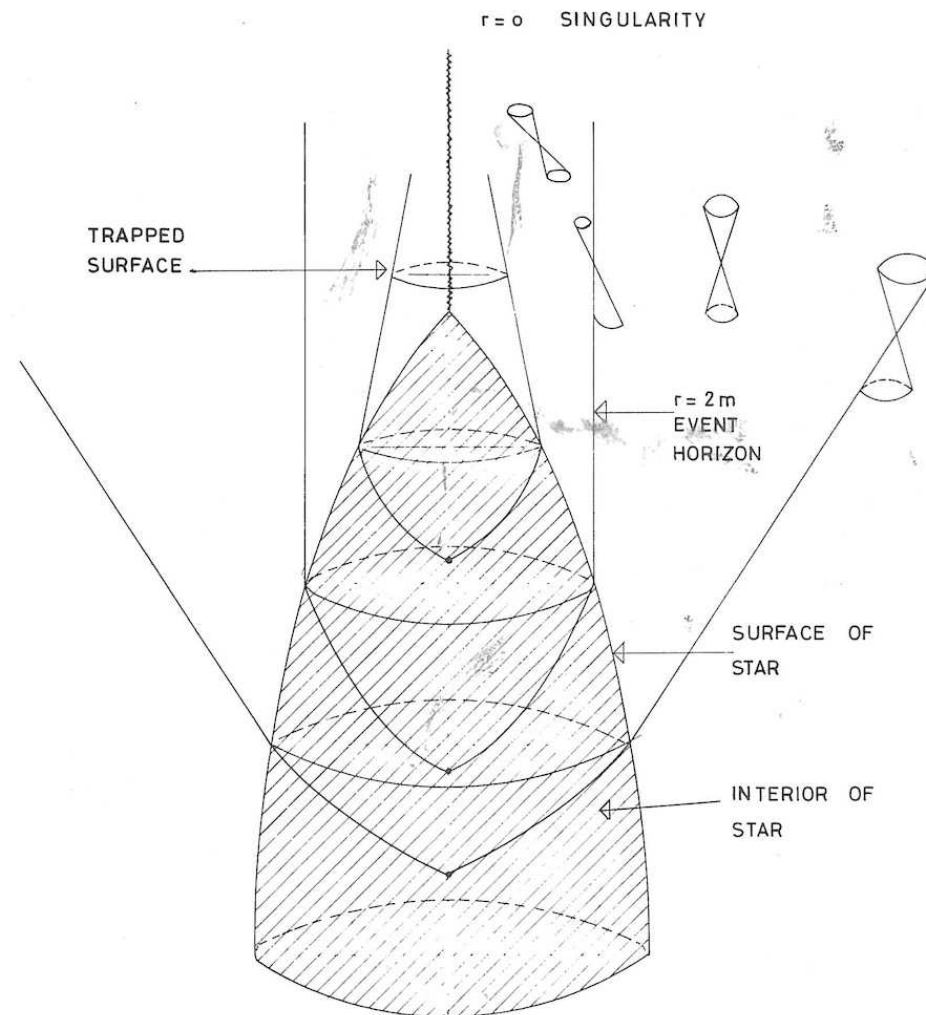
The heavy densely packed dying stars that speckle space may help determine how matter behaves when enclosed in its own gravitational field—By Ann Ewing

But ...

... It is virtually impossible to prove unambiguously the presence of black-hole horizon by observing the electromagnetic signal from its presumed vicinity in a cosmic system – absence of radiation signal does not necessarily prove the absence of the surface of the body and the existence of the horizon.

(See Abramowicz et al. 2002, A&A, 396, L31)

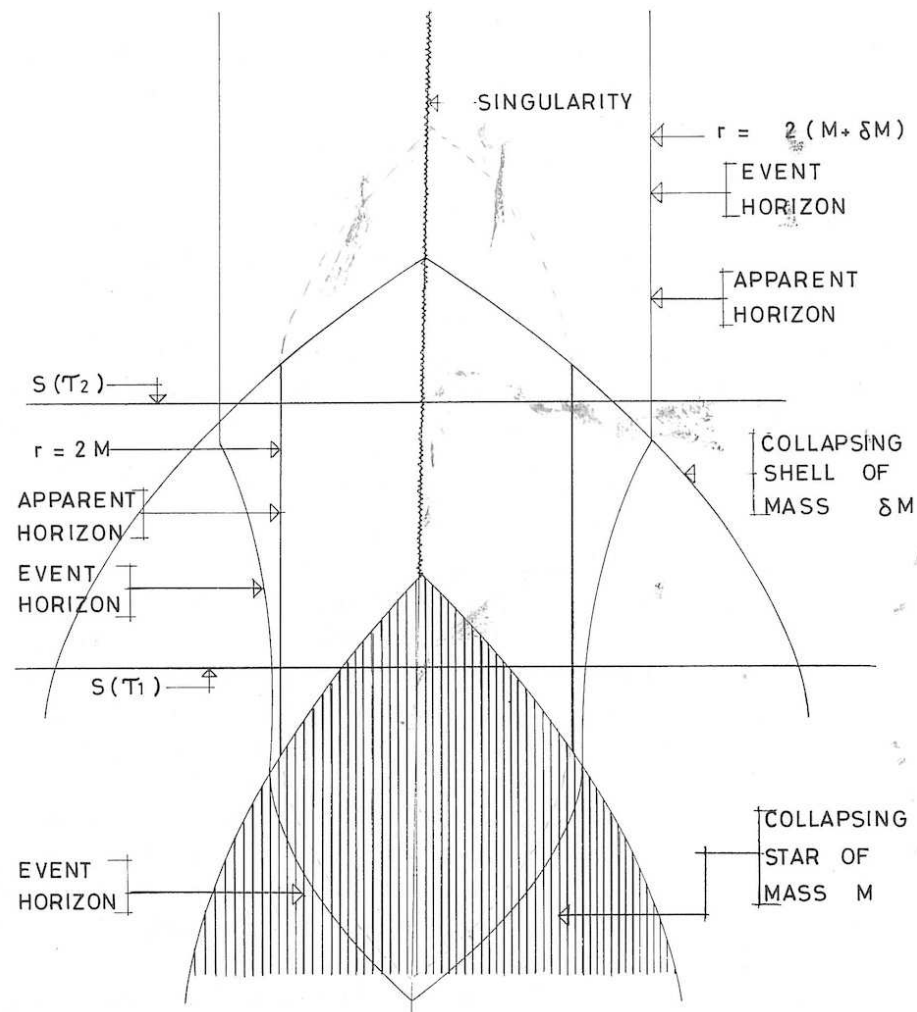
Astrophysical BHs in GR



Emergence of Event Horizon and Trapped Surfaces.

(Hawking, 1972)

Astrophysical BHs in GR



Growth of Event Horizon by a collapsing shell.

(Hawking, 1972)