

title

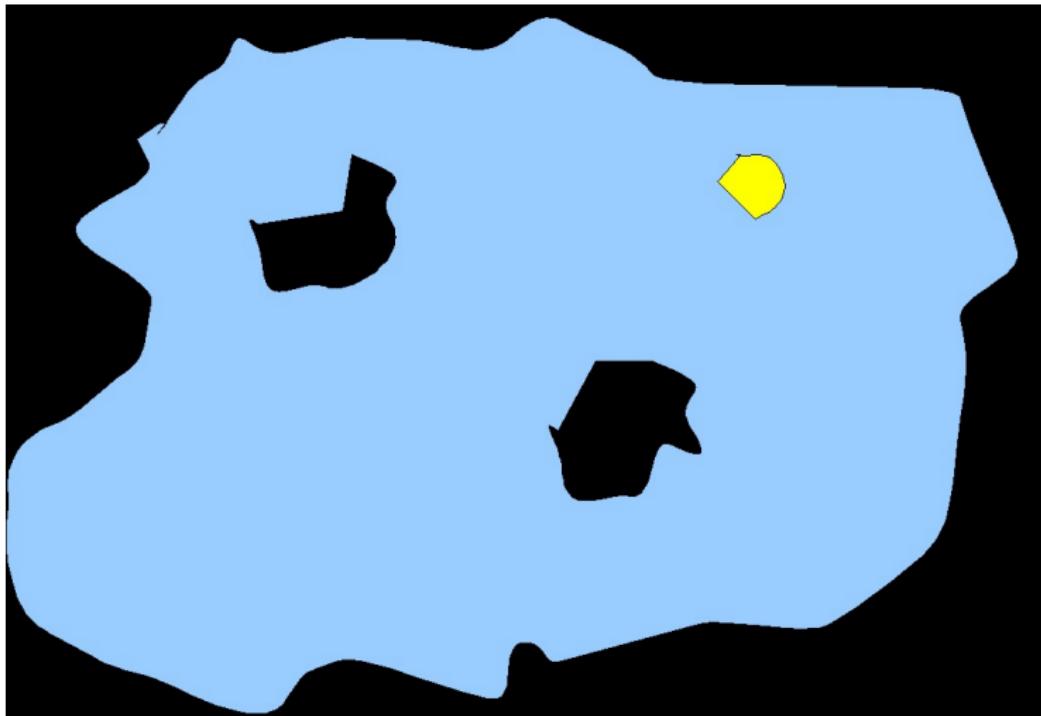
Badatelská komunikace

Vojtěch Svoboda

September 20, 2022

(hrubá zkratka)

Hranice lidského poznání



kredit: [V. Svoboda, 2020]

Poslední Nobelovy ceny za fyziku

The Nobel Prize in Physics 2021



© Nobel Prize Outreach. Photo:
Risdon Photography
Syukuro Manabe

Prize share: 1/4



© Nobel Prize Outreach. Photo:
Bernhard Ludewig
Klaus Hasselmann

Prize share: 1/4



© Nobel Prize Outreach. Photo:
Laura Sbarboli
Giorgio Parisi

Prize share: 1/2

- Zelenáč
- Začátečník
- Novice
- Středně pokročilý
- Pokročilý
- Vědec
- Guru
- Kouzelník

kredit: [The Nobel Foundation, 2020]

Cesta je dlouhá

Outline

1 Úvod

2 Vědecký článek

3 Konference

Co obnáší badatelská práce

- Bádání.
- Psaní žádostí o granty.
- Nemůže mít klapky na očích.
- Starost o dorost, výuka.
- Byrokracie (bohužel).
- Prezentování, publikování (konference, články, monografie).
- Oponentská práce.
- Neustálé "keep to date", rešerše.

"Publish or perish" či "Publikuj, nebo se pakuj"

Science citation index

- Články v časopisech.
- Vystoupení na konferenci.
- Publikační životopis.
- Citační životopis.

Komunikace

Outline

1 Úvod

2 Vědecký článek

3 Konference

Článek

G Model
FUSION-8751; No. of Pages 7

ARTICLE IN PRESS

Fusion Engineering and Design xxx (2016) xxx–xxx



Contents lists available at ScienceDirect

Fusion Engineering and Design

journal homepage: www.elsevier.com/locate/fusengdes



Remote operation of the GOLEM tokamak for Fusion Education

O. Grover^a, J. Kocman^a, M. Odstrcil^c, T. Odstrcil^b, M. Matusu^a, J. Stöckel^{a,b}, V. Svoboda^{a,*}, G. Vondrasek^a, J. Zara^d

^a Faculty of Nuclear Sciences and Physical Engineering CTU Prague, CZ-115 19, Czech Republic

^b Institute of Plasma Physics AS CR, Prague CZ-821 21, Czech Republic

^c University of Southampton, Southampton SO17 1BJ, UK

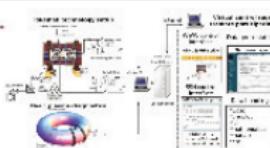
^d Faculty of Electrical Engineering CTU Prague, CZ-166 27, Czech Republic

^{*} Max-Planck-Institut für Plasmaphysik, D-85748 Garching, Germany

HIGHLIGHTS

- The remote operation of the tokamak GOLEM for educational purposes.

GRAPHICAL ABSTRACT



ARTICLE INFO

Article history:

Received 19 June 2015

Received in revised form 26 February 2016

Accepted 2 May 2016

Available online xxxx

Keywords:

Tokamak technology

Remote participation

Education

Nuclear fusion

ABSTRACT

Practically oriented education in the field of thermonuclear fusion is highly requested. However, the high complexity of appropriate experiments makes it difficult to develop and maintain laboratories where students can take part in hands-on experiments in this field of study. One possible solution is to establish centres with specific high temperature plasma experiments where students can visit such a laboratory and perform their experiments *in-situ*. With the advancements of IT technologies it naturally follows to make a step forward and connect these with necessary plasma physics technologies and thus allow to access even sophisticated experiments remotely. Tokamak GOLEM is a small, modest device with its infrastructure linked to web technologies allowing students to set-up necessary discharge parameters, submit them into a queue and within minutes obtain the results in the form of a discharge homepage.

Web of Science (vzdáleně skrz Shibboleth)

Web of Science InCites Journal Citation Reports Essential Science Indicators EndNote Publons Research Master Journal List Sign In Help English

Web of Science

Tools Searches and alerts Search History Marked List

Web of Science will undergo scheduled maintenance from September 24, 2020 at 11:00 GMT to September 24, 2020 at 23:00 GMT.
During this time, access may be intermittent. We apologize for any inconvenience.

Select a database Web of Science Core Collection

Basic Search Author Search Cited Reference Search Advanced Search Structure Search

Example: oil spill* mediterranean Topic Search Search tips

* Add row | Reset

Timespan All years (1945 - 2020) More settings

Academy of Sciences of the Czech Republic

Clarivate Analytics

💡 Read: How to save hundreds of hours and fly through your next research paper

Přístup pro ČVUT

<http://knihovna.cvut.cz/podpora-vedy/citacni-databaze/web-of-science>

Publikace - jiná liga

ISI Web of KnowledgeSM Web of Science GO HOME

DocType=All document types; Language=All languages; Databases=SCI-EXPANDED, SSCI, A&HCI; Timespan=1945-2007
Send us feedback on Author Finder.

Search within results: Enter a topic SEA

Refine your results Subject Categories | Source Titles | Document Types | Authors | Publication Years more choices

91 results found (Set #1) Go to Page: 1 of 10 GO Records 1 -- 10 Show 10 per page ▾

|◀◀◀ [1 | 2 ...] ▶▶▶|

Use the checkboxes to select records for output. See the sidebar for options.

<input type="checkbox"/>	1. Hawking SW, Hertog T Populating the landscape: A top-down approach PHYSICAL REVIEW D 73 (12): Art. No. 123527 JUN 2006 Times Cited: 5
<input type="checkbox"/>	2. Hawking SW Information loss in black holes PHYSICAL REVIEW D 72 (8): Art. No. 084013 OCT 2005 Times Cited: 30
<input type="checkbox"/>	3. Hawking SW, Hertog T Why does inflation start at the top of the hill? PHYSICAL REVIEW D 66 (12): Art. No. 123509 DEC 15 2002 Times Cited: 16
<input type="checkbox"/>	4. Hawking SW, Hertog T, Reall HS Trace anomaly driven inflation PHYSICAL REVIEW D 63 (8): Art. No. 083504 APR 15 2001 Times Cited: 58
<input type="checkbox"/>	5. Hawking SW, Hertog T, Reall HS Brane new world PHYSICAL REVIEW D 62 (4): Art. No. 043501 AUG 15 2000 Times Cited: 154

Sort by: Latest date SORT

Analyze Results: ANALYZE View rankings of the authors, journals, etc. for these records.

Citation Report: CITATION REPORT View detailed citation counts and the h-index value for the results.

Output Records: Selected records on page All records on page Records 1 to 10 Bibliographic Fields PRINT E-MAIL SAVE

kredit: web of science [Clarivate, 2020]

Článek - jiná liga

PHYSICAL REVIEW D 73, 123527 (2006)

Populating the landscape: A top-down approach

S. W. Hawking¹ and Thomas Hertog²

¹DAMTP, University of Cambridge, Wilberforce Road, Cambridge CB3 0WA, UK

²Physics Department, Theory Division, CERN, CH-1211 Geneva 23, Switzerland

(Received 20 February 2006; published 23 June 2006)

We put forward a framework for cosmology that combines the string landscape with no boundary initial conditions. In this framework, amplitudes for alternative histories for the universe are calculated with final boundary conditions only. This leads to a top-down approach to cosmology, in which the histories of the universe depend on the precise question asked. We study the observational consequences of no boundary initial conditions on the landscape, and outline a scheme to test the theory. This is illustrated in a simple model landscape that admits several alternative inflationary histories for the universe. Only a few of the possible vacua in the landscape will be populated. We also discuss in what respect the top-down approach differs from other approaches to cosmology in the string landscape, like eternal inflation.

DOI: 10.1103/PhysRevD.73.123527

PACS numbers: 98.80.Qc, 11.25.-w, 98.80.Cq

I. INTRODUCTION

It seems likely that string theory contains a vast ensemble of stable and metastable vacua, including some with a small positive effective cosmological constant [1] and the low energy effective field theory of the standard model. Recent progress on the construction of metastable de Sitter vacua [2] lends further support to the notion of a string landscape [3], and a statistical analysis gives an idea of the distribution of some properties among the vacua [4]. But it has remained unclear what is the correct framework for cosmology in the string landscape. There are good reasons to believe, however, that a proper understanding of the cosmological dynamics will be essential for the landscape to be predictive [5].

In particle physics, one usually computes S-matrix ele-

the universe, and there is certainly no opportunity for observing multiple copies of the universe.

In fact if one does adopt a bottom-up approach to cosmology, one is immediately led to an essentially classical framework, in which one loses all ability to explain cosmology's central question—why our universe is the way it is. In particular a bottom-up approach to cosmology either requires one to postulate an initial state of the universe that is carefully fine-tuned [10]—as if prescribed by an outside agency—or it requires one to invoke the notion of eternal inflation [11], which prevents one from predicting what a typical observer would see.

Here we put forward a different approach to cosmology in the string landscape, based not on the classical idea of a single history for the universe but on the quantum sum over histories [12]. We argue that the quantum origin of the



Easy Search Results -- Full Record

Article 4 of 84

◀ PREVIOUS

NEXT ▶

▲ SUMMARY

Brane new world – art. no. 043501
Hawking SW, Hertog T, Reall HS
PHYSICAL REVIEW D
6204: (4) 3501-+ AUG 15 2000

Document type: Article Language: English Cited References: 45 Times Cited: 78

Abstract:

We study a Randall–Sundrum cosmological scenario consisting of a domain wall in anti-de Sitter space with a strongly coupled large N conformal field theory. We allow for a fully quantum mechanical treatment of this CFT, in contrast with the usual treatment of matter fields in inflationary cosmology. The configuration space is a de Sitter geometry for the domain wall. This is the analogue of Starobinsky's four dimensional model of anomaly driven inflation. Studying the evolution of the system at the horizon. We calculate the graviton correlator using the Hartle–Hawking “no boundary” proposal and analytically continue to the Euclidean regime. Perturbations on all but the largest angular scales. This is true independently of how the de Sitter geometry arises, i.e., it is also true for four dimensional theories that behave like a CFT on small scales, our results suggest that tensor perturbations on small scales are far smaller than predicted by all previous calculations.

Citační analýza

Web of Science®

[WELCOME](#) [HELP](#) [GENERAL SEARCH](#) [CITED REF SEARCH](#) [SEARCH HISTORY](#) [ADVANCED SEARCH](#)

Citation Report

<< Return to previous Summary page

AU=(HAWKING SW) AND SH=(PHYSICAL SCIENCES) AND AP=(UNIV CAMBRIDGE OR CALTECH OR DEPT APPL MATH & THEORET PHYS)
DocType=All document types; Language=All languages; Databases=SCI-EXPANDED, SSCI, A&HCI; Timespan=1945-2007

Published Items in Each Year

Year	Items
1987	2
1988	3
1989	2
1990	5
1991	3
1992	3
1993	2
1994	2
1995	5
1996	3
1997	2
1998	4
1999	5
2000	4
2001	1
2002	1
2003	1
2004	1
2005	1
2006	1

Only the first 20 years are displayed.
[View a graph with all years.](#)

Citations in Each Year

Year	Citations
1988	450
1989	600
1990	500
1991	450
1992	550
1993	500
1994	650
1995	600
1996	650
1997	600
1998	650
1999	850
2000	800
2001	850
2002	850
2003	800
2004	750
2005	800
2006	900
2007	300

Only the first 20 years are displayed.
[View a graph with all years.](#)

Results found: 100
Sum of the Times Cited [\(i\)](#): 16,596 [View without self citations](#)
Average Citations per item [\(i\)](#): 165.96
h-index [\(i\)](#): 53

Records to [PRINT](#) [E-MAIL](#) [SAVE](#)

This report reflects citations to source items indexed within Web of Science. Perform a Cited Reference Search to include citations to items not indexed within Web of Science

100 results found
Records 1 -- 10

Go to Page: of 10 [GO](#)
[◀◀](#) [◀](#) [1] [2 ...](#) [▶](#) [▶▶](#)

Times Cited

Reference na článek

 Web of Science®

[WELCOME](#) [HELP](#) [GENERAL SEARCH](#) [CITED REF SEARCH](#) [SEARCH HISTORY](#) [ADVANCED SEARCH](#) [SEARCH RESULTS](#)

Citing Articles--Summary

PARTICLE CREATION BY BLACK-HOLES
HAWKING SW
COMMUNICATIONS IN MATHEMATICAL PHYSICS
43 (3): 199-220 1975

These documents in the database cite the above record:

Refine your results
[Subject Categories](#) | [Source Titles](#) | [Document Types](#) | [Authors](#) | [Publication Years](#) [more choices](#)

2,615 results found
Records 1 -- 10 [Show 10 per page](#) ▾ Go to Page: of 262 [GO](#)

|◀◀◀ [1] 2 ... ▶▶▶|

Use the checkboxes to select records for output. See the sidebar for options.

1. Lee JW, Oh S, Kim J
Quantum separability of thermal spin one boson systems
PHYSICS LETTERS A 363 (5-6): 374-377 APR 9 2007
Times Cited: 0 [VIEW FULL TEXT](#)

2. Li GQ
Turning radiation of a Gibbons-Maeda dilaton black hole
THEORETICAL AND MATHEMATICAL PHYSICS 151 (1): 566-569 APR 2007
Times Cited: 0 [VIEW FULL TEXT](#)

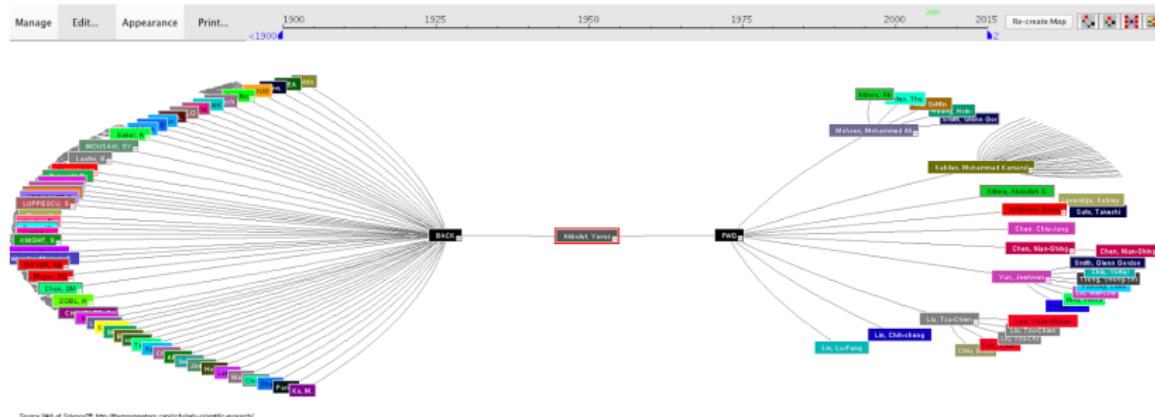
3. Park MI
Thermodynamics of exotic black holes, negative temperature, and Bekenstein-Hawking entropy
PHYSICS LETTERS B 647 (5-6): 472-476 APR 19 2007
Times Cited: 0 [VIEW FULL TEXT](#)

Analyze Results:
[ANALYZE](#)
View rankings of the authors, journals, etc. for these records.

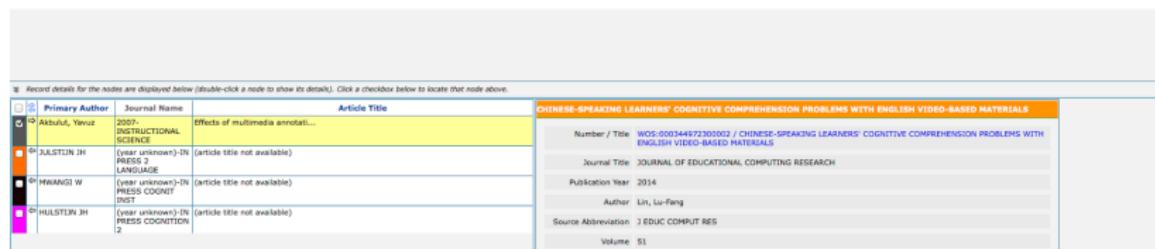
Output Records:
 Selected records on page
 All records on page
 Records to
[BIBLIOGRAPHIC FIELDS](#)
[PRINT](#) [E-MAIL](#) [SAVE](#)
[EXPORT TO REFERENCE SOFTWARE](#)
[SAVE TO MY !\[\]\(315a30994a53bdc7c0b3b5d60bd68a8f_img.jpg\) Web](#)

kredit: web of science [Clarivate, 2020]

Citační mapa



Source: Web of Science™. <http://www.researcherid.com/citaclately-scientific-research/>



kredit: web of science [Clarivate, 2020]

"Publish or perish" či "Publikuj, nebo se pakuj"

Dobrá otázka: Science citation index - co Vojtěch Svoboda?

- @Research gate
- @Scopus

Outline

1 Úvod

2 Vědecký článek

3 Konference

Konference



kredit: [Google, 2020]

- Pozvané přednášky
- Shrnující přednášky
- Klasické přednášky
- Posterové sekce
- ... welcom páry,
doprovodný pr., farw.
párty, satelitní
workshopy

Vykomunikovat třeba až 1000 příspěvků ..

Program konference

Time	Monday June 17th	Tuesday June 18th	Wednesday June 19th	Thursday June 20th	Friday June 21st
8h30					
9h	Opening session	I-2.01 D.Pesme	I-3.01 M.L.Watkins	I-4.01 G.Morfill	O-5.01 H.Henriksson O-5.02 K.D.Zastrow O-5.03 A.Stäbler O-5.04 G.T.Huysemans O-5.05 J.Candy
10h	Hannes Alfvén Prize lecture	I-2.02 A.Sips	I-3.02 R.Jaenicke	I-4.02 L.N.Vyacheslavov	coffee
	coffee	I-2.03 J.-M.Moret	I-3.03 B.Rus	I-4.03 V.E.Semenov	
11h	I-1.01 H.Lesch	I-2.04 M.Roth	I-3.04 J.T.Mendonça	I-4.04 W.Dorland	O-5.06 I.Nunes O-5.07 M.v.Hellermann O-5.08 B.E.Chapman
	I-1.02 P.Muggli	I-2.05 R.Kodama	I-3.05 K.Krushelnick	I-4.05 E.Ascasibar	
12h	I-1.03 B.Saoutic	I-2.06 I.Cook	I-3.06 P.Helander	I-4.06 H.Summers	O-5.09 Y.V.Yakovenko
13h	lunch	lunch	lunch	lunch	lunch
14h	I-1.04 G.Counsell	I-2.07 T.Donné		I-4.07 M.Okabayashi	I-5.01 U.Schramm
	I-1.05 T.Fukuda	I-2.08 A.Fasoli		I-4.08 W.A.Cooper	I-5.02 F.Porcelli
	O-1.01 S.Jachimch	O-2.01 P.Lotte	departure 13h30 Montreux station	O-4.01 E.Poli	I-5.03 D.D.Ryutov
	O-1.02 S.V.Lebedev	O-2.02 M.J.Hole		O-4.02 A.D.Turnbull	Closing session
	O-1.03 V.Krivenski	O-2.03 J.Stöckel		O-4.03 S.Coda	
	O-1.04 C.Cestaldo	O-2.04 P.R.Thomas		O-4.04 Voitsekovich	
	coffee	coffee		coffee	
	O-1.05 J.Decker	O-2.05 B.Gonçalves		O-4.05 Krasheninnikov	
	O-1.06 F.Sardei	O-2.06 H.W.Müller		O-4.06 A.Bers	
	O-1.07 B.Esposito	O-2.07 G.Martin		O-4.07 B.Coppi	
	O-1.08 V.E.Fortov	O-2.08 M.R.Wade		O-4.08 M.Krämer	
	O-1.09 T.Estrada	O-2.09 D.A.Gates		O-4.09 N.N	
15h	posters P1 Laser Plasma Particle Acceleration		posters P2 Laser Plasma Particle Acceleration		Dusty and Complex Plasmas
16h			Excursion		
17h			Edge, SOL, and Divertor Plasma Turbulence and Transport		
18h			return 19h00 Montreux station		
19h	18h30 Montreux Pier Reception Steamer "Lausanne"		18h30 departure for Gala Dinner		



Programme of the 29th EPS Conference on Plasma Physics and Controlled Fusion, Montreux, 2002 status : May 30

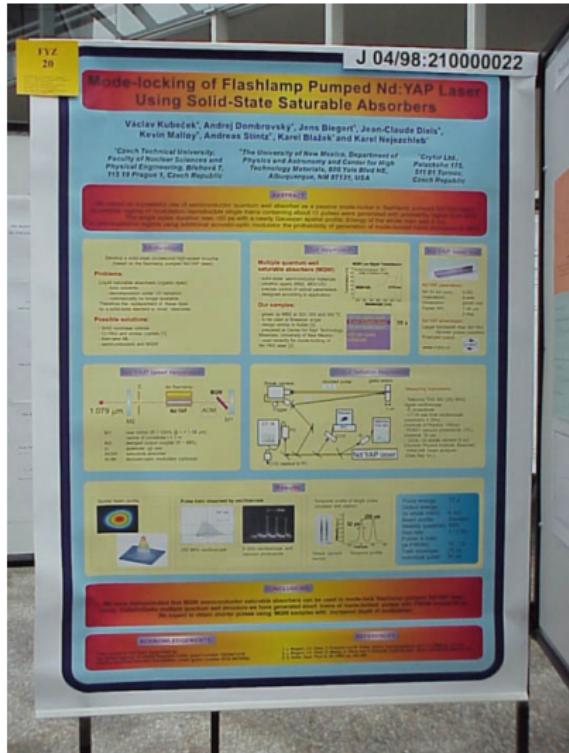
kredit: [EPS PPCF conference, 2002]

Posterová sekce



kredit: ČVUT workshop 2000 [CTU, 2011]

Poster



- Nástěnka v určený čas.
 - Být v daný čas přítomen

kredit: ČVUT workshop 2000

Produkce

LOC:

- Sehnat magnety.
- First announcement + Call for papers.
- Second announcement.
- Book of abstracts.
- Konference.
- Proceedings.

AUTOR:

- Celoroční práce.
- Přihlášení sebe a příspěvku na konferenci.
- Sepsání jednostránkového abstraktu.
- 4-stránkový proceeding.
- Sestavení prezentace či posteru.
- Odprezentování.

Kýžený závěr

```
@article{tibon:94,  
title="An assesment of theoretical models based on observations in the JET tokamak",  
author="F. Tibone and J.W. Connor and T.E. Stringer and H.R. Wilson",  
journal="Plasma Phys. and Control. Fusion",  
year="1994",  
volume="36",  
number="",  
publisher="Institute of Physics publishing",  
address="",  
pages="473-512",  
}□
```

kredit: [V. Svoboda, 2020]

Role chairperson



kredit: [SOFT, 2016]

Závěr

Komunikovat všemi směry ..

-  Clarivate (2020).
Web of science.
[Online; accessed September 20, 2022].
-  CTU (2011).
Semináře workshop Čvut.
[Online; accessed September 20, 2022].
-  EPS PPCF conference (2002).
Plasma physics and controlled fusion conference montreux.
[Online; accessed September 20, 2022].
-  Google (2020).
Images.
[Online; accessed September 20, 2022].
-  Hawking, S. W. and Hertog, T. (2006).
Populating the landscape: A top-down approach.

Phys. Rev. D, 73:123527.

-  **SOFT (2016).**
29th symposium on fusion technology.
[Online; accessed September 20, 2022].
-  **The Nobel Foundation (2020).**
The nobel prize.
[Online; accessed September 20, 2022].
-  **V. Svoboda (2020).**
Miscellaneous.
-  **Ústřední knihovna ČVUT (2020).**
Web of science.
[Online; accessed September 20, 2022].