Univerza v Ljubljani

Open science practices: requirements and possibilities

University of Ljubljana, MSCA Postdoctoral Fellowships Masterclass 2022
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Open science is a cross-cutting issue in all MSCA actions

→ *In a MSCA proposal*

→ *In a MSCA project*

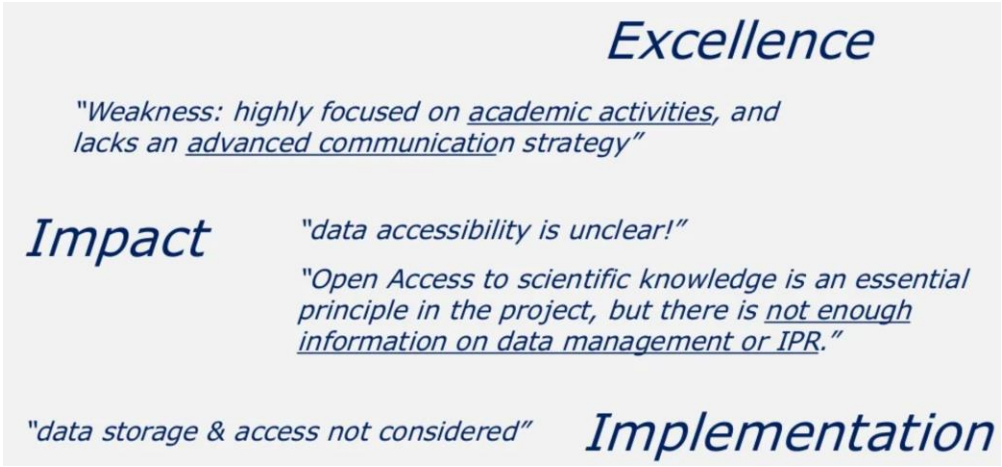
In a MSCA proposal

Adequately plan open science in a project proposal (check about OS in your discipline, contact us)

Open science in a project proposal is evaluated under excellence:

- Quality and appropriateness of open science practices
- Sharing of research results
- Data management
- Providing open access to outputs
- Including relevant societal actors in research

https://www.fosteropenscience.eu/event/open-science-marie-curie-itn-proposals-0



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Also in a MSCA proposal

Horizon Europe Programme

Marie Skłodowska-Curie Actions
Postdoctoral Fellowships (HE MSCA PF)

Application form (Part A)
Project proposal – Technical description (Part B)

Version 1.1
5 May 2022

Application forms

Table Of Contents | Validate Form | Save | Save&Close

Proposal ID

Acronym **Acronym is mandatory**

Short name

List of up to 5 publications, widely-used datasets, software, goods, services, or any other achievements relevant to the call content.

Type of achievement	Short description (Max 500 characters)	Add

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af_he-msca-pf_en.pdf

General rule in Horizon Europe: previous achievements have to be open access (publications, research data, software …)

→Follow it in MSCA proposal as well

→Deposit your previous publications, data … in repositories (e.g., Zenodo)

→List DOIs and URLs to open access versions in a MSCA proposal

In a MSCA project

- ***Mandatory open science practices:***
  - Open access to all publications from the project
  - Data Management Plan (DMP)
  - FAIR research data and „as open as possible, as closed as necessary“
- ***Very recommended open science practices:***
  - FAIR and open access to other research results (software, models, algorithms, processes, protocols ...)
  - Use FAIR research data and services from EOSC
  - Preregistration
  - Registered reports
  - Sharing preprints
  - Open peer review
  - Citizen science

Open access to publications

- Mandatory open access to peer-reviewed articles and longer texts through trusted repositories
- Embargo in a repository is not allowed
- Authors or university must retain sufficient intellectual property rights to comply with the open access requirements (articles: CC BY 4.0, monographs CC BY-NC or CC BY-ND)

Definition of an open access publication

- Free access for readers
- Creative Commons (CC BY) licenses determine allowed reuse
- Publication and all supplementary material are deposited into at least one online repository

Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities, 2003

Open access via a repository

Green OA: article published in a subscription journal + peer-reviewed manuscript deposited in a repository

- No cost for authors
- Version of Record VoR: © 2022 Publisher
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Gold OA: open access journals

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Hybrid journals: individual article in a subscription journal is openly accessible

- Article Processing Charges APC paid – not an eligible cost in Horizon Europe
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Open Research Europe (ORE)

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- For articles from Horizon 2020 and Horizon Europe projects
- Open peer review, open access
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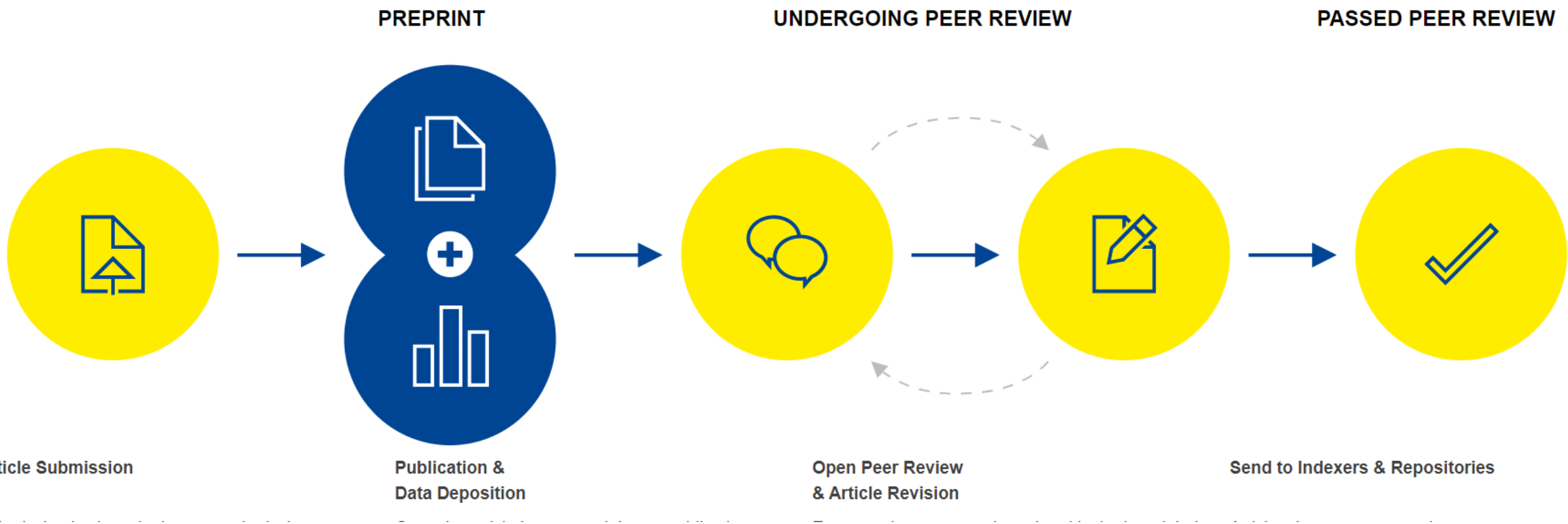

Visualization and measurements of shock waves in cavitating flow

Petkovšek, Martin (author), Hočevar, Marko (author), Dular, Matevž (author)

PDF - Presentation file, Download (11,31 MB)
MD5: 3890FED4231503190F9658C825DABA01

URL - Source URL, Visit
https://www.sciencedirect.com/science/article/pii/S0894177720307196?via%3Dihub

Abstract

Upon cavitation cloud collapse an omnidirectional shock wave is emitted. It then travels through the flow field, causing a cascade of events resulting in erosion, noise, vibration and the cavitation shedding process.
Despite that the accumulated data points evidently to the presence of the shock waves, the direct measurements hardly exist - and even then, they are very expensive and time consuming to perform. In the present paper, the possibility of detecting shock waves inside cavitating flow is shown.
The methodology bases on using two conventional high speed cameras. With the first one cavitating flow from a distance is observed, determining the position of the wave, while the second camera with a microscopic lens enables a close-up view to determine the number and size change of air bubbles

Language:	English
Keywords:	cavitation, shock waves, high speed video, cloud collapse
Work type:	Article (dk_c)
Tipology:	1.01 - Original Scientific Article
Organization:	FS - Faculty of Mechanical Engineering
Year:	2020
Number of pages:	Str. 1-10
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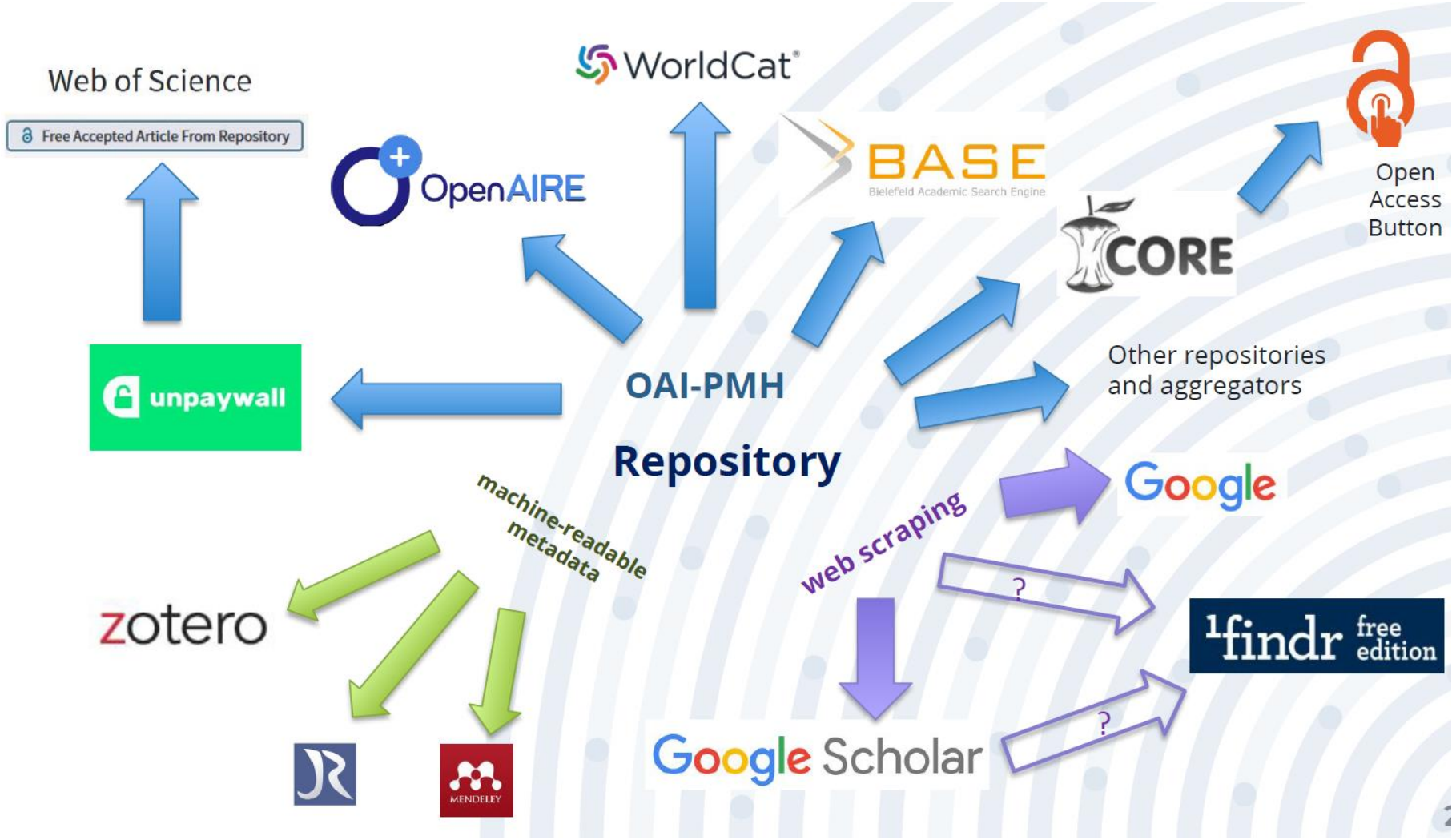
Project no.:	771567
Name:	An investigation of the mechanisms at the interaction between cavitation bubbles and contaminants
Acronym:	CABUM

Licences

https://repozitorij.uni-lj.si/IzpisGradiva.php?id=117685

Aggregation of metadata from repositories



Milica Ševkušić: Institutional repository

Research data

- Establish a Data Management Plan (DMP) and regularly update it
  - What data will be generated
  - How it will be curated and preserved
  - Which part will be open (and how)
- **FAIR** research data = **F**indable, **A**ccessible, **I**nteroperable, **R**eusable
- License the data with CC BY or CC0
- „As open as possible, as closed as necessary“ via a trusted repository
- DMP tools: Argos, DMPonline
- DMP examples: DMP Use Case Project
- Find a data archive: re3data.org - Registry of Research Data Repositories, FAIRsharing.org - Databases

General rules on exemptions from open research data

In publicly funded research or non-funded research, legislation and security need to be protected:

- Intellectual property rights: Copyright and Related Rights Act, Industrial Property Act
- Personal data: General Data Protection Regulation, Personal Data Protection Act
- Security of people and country

In a contract with a company, legislation and security need to be protected, but also contract provisions:

- Protection of business interest/secret as specified in the contract,
- Disclosure/open access to research data would be considered as breach of contract causing (financial) damage to a company and possible legal/financial sanctions

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Personal data

Informed consent

Personal data processed according to the informed consent of research subjects

Tool: DARIAH ELDAH Consent Form Wizard

Anonymization of personal data

Personal or business data rendered anonymous so it is impossible to link the data to a specific person or business subject

Tool: OpenAIRE Amnesia

Pseudoanonymization of personal data

Personal data is replaced by identifiers/pseudonyms, risk of re-identification

CESSDA advice:

Sharing personal data can often be accomplished by using a combination of obtaining informed consent, data anonymisation and regulating data access

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Thank you!

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