ETDs: A Logical Addition to Your Digital Repository?

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DRUM Coordinator

NISO Forum
3 December 2007
DRUM Background

- Initial proposal to Provost - May 2003
- Mission: store, index, distribute, and preserve the research works of UM faculty
- Developed using DSpace
  - open source
  - active user community
  - out-of-the-box implementation
- Launched in August 2004
  - 1100 documents
  - 7100+ documents as of November 2007
Welcome to the repository for University of Maryland research.

Any UM Faculty member can make digital works permanently accessible and available across the Internet with DRUM. Find out more about depositing your work.

Learn more:
- About DRUM
- About Institutional Repositories

The following communities of digital works are available:

Collections Organized by Department
- A. James Clark School of Engineering
- College of Agriculture & Natural Resources
- College of Architecture, Planning, & Preservation
- College of Arts & Humanities
- College of Behavioral & Social Sciences
- College of Chemical & Life Sciences
- College of Computer, Mathematical & Physical Sciences
- College of Education
- College of Information Studies
- Philip Merrill College of Journalism
- Robert H. Smith School of Business
- School of Public Health
- School of Public Policy
- University Libraries (faculty)

UM Community-managed Collections
- Center for Food, Illution, and Agriculture Policy
- Institute for Systems Research
- Tech Reports in Computer Science and Engineering
- Theses and Dissertations from UM

Senators Cornyn (R-TX), Lieberman (D-CT) and Sessions (R-AL) have introduced legislation that would require federal agencies with research portfolios of $100 million or more to make resulting peer-reviewed articles publicly available online within 6 months of publication. Research results would need to be preserved and made available via a stable, open access digital repository like PubMed Central or DRUM. Read more about this legislation on the SPARC Resources web site. The text and current status of the bill can be accessed through THOMAS at S.2695. Watch this space for further developments!

NIH Public Access Policy

In 2005, NIH announced a policy for grantees asking them to deposit articles based on funded research into PubMed Central. To learn about the policy and how it relates to DRUM, check out our Answers to Common Questions page.

In addition, read the Memo to Campus Faculty from Dean Charles Lowry discussing the new policy and outlining what funded researchers can do to prepare their works for deposit.

Thesis/Dissertation Deposit Timeline

New submissions to the thesis/dissertation collections are added automatically as they are received from the Graduate School. Currently, the Graduate School deposits all theses and dissertations from a given semester after the official graduation date. This means that there may be up to a 4 month delay in the appearance of a given thesis/dissertation in DRUM.
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Shown below is a list of communities and the collections and sub-communities within them. Click on a name to view that community or collection home page.

**Collections Organized by Department**

- **A. James Clark School of Engineering**
  - **Aerospace Engineering**
    - Aerospace Engineering Research Works
    - Aerospace Engineering Theses and Dissertations
  - **Chemical & Biomolecular Engineering**
    - Chemical and Biomolecular Engineering Research Works
    - Chemical and Biomolecular Engineering Theses and Dissertations
  - **Civil & Environmental Engineering**
    - Civil & Environmental Engineering Research Works
    - Civil & Environmental Engineering Theses and Dissertations
  - **Electrical & Computer Engineering**
    - Electrical & Computer Engineering Research Works
    - Electrical & Computer Engineering Theses and Dissertations
  - **Fire Protection Engineering**
    - Fire Protection Engineering Research Works
    - Fire Protection Engineering Theses and Dissertations
  - **Fischell Department of Bioengineering**
    - Fischell Department of Bioengineering Research Works
    - Fischell Department of Bioengineering Theses and Dissertations
  - **Materials Science & Engineering**
    - Materials Science & Engineering Research Works
    - Materials Science & Engineering Theses and Dissertations
  - **Mechanical Engineering**
    - Mechanical Engineering Research Works
    - Mechanical Engineering Theses and Dissertations
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<tr>
<th>3476</th>
<th>Theses &amp; Dissertations</th>
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<tr>
<td>3354</td>
<td>Technical Reports</td>
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<tr>
<td>325</td>
<td>Faculty Contributions</td>
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<td><strong>7155</strong></td>
<td><strong>TOTAL</strong> (as of October 2007)</td>
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DRUM Statistics

- Searches per month
  - avg 2025 per month in 2005
  - avg 6700+ per month in 2006
  - avg 8400+ per month this year
ETD Stakeholders

- Students
- Faculty Advisors
- Graduate School
- Library
- IT Department
ETD Software Options

- Commercial
  - ProQuest / BEPRESS

- Open Source
  - ETD-db (Virginia Tech & NDLTD)

- NDLTD
  - Networked Digital Library of Theses and Dissertations
  - http://www.ndltd.org/
ETD Benefits

1) Research can be found, read, and used by a global audience
2) Greatly increases the chances of the research being cited
3) Lower printing and copying costs
4) Allows students to interact more efficiently with faculty
5) Students can be more creative
6) Easy to deposit works along with associated content
7) Educates students on electronic publishing
8) Showcases an institution’s research
ETD Concerns

- Will journal publishers still accept my article if it is available electronically?
- What if I want to submit a patent based on my research?
- What if I want to write a book related to my thesis of dissertation?
- Won’t it be easier for someone to plagiarize my research if it is freely available online?
UM ETD Embargo Options

- Restrict access for one year
- Restrict access for six years
- Restrict access indefinitely
  - Requires written approval by the Dean of the Graduate School
- Non-circulating copy still available in the library
Why Embargo?

- For 1-year embargoes
  - Seek patent protection for material in the thesis or dissertation
  - Publish in a journal that has restrictions for depositing in an open access repository

- For 6-year embargoes
  - Publish a book based on your dissertation
DSpace Embargo Options

- Withhold entire record and PDF from the digital repository
- Create “open” and “closed” collections
Cornell University Graduate School

Community home page

The Cornell University Graduate School has 93 major fields and 14 minor fields of study. For more information about the Cornell University Graduate School go to its Home Page.

In: Cornell University Graduate School

Search for

or browse Titles Authors By Date

Collections in this community

- Theses and Dissertations (CLOSED)
- Theses and Dissertations (OPEN)
DSpace Embargo Options

- Withhold entire record and PDF from the digital repository
- Create “open” and “closed” collections
- Create non-printable PDFs for viewing
Life cycle evolution and systematics of Psammaperus sp. (Hydrozoa), 2004. Includes bibliographical references.

**URI:** http://hdl.handle.net/1721.1/39414

**Appears in Collections:** Biology - Ph.D. / Sc.D.
Biology - Ph.D. / Sc.D.

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Sponsors: Digital Repository at the University of Maryland University of Maryland (College Park, Md.)

Keywords: 0548 Engineering, Mechanical convection; flow boiling; FC-72; microgap; foam

Issue Date: 5-Oct-2007

Abstract: An open and foam-filled microgap cooler, providing direct liquid cooling for a simulated electronic/photonic component and which eliminates the problematic thermal resistance of the commonly-used thermal interface material (TIM), is examined. The single phase heat transfer and pressure drop results of water are used to validate a detailed numerical model and, together with the convective FC-72 data, establish a baseline for microgap cooler performance. The two-phase heat transfer characteristics of FC-72 are examined at various microgap dimensions, heat fluxes, and mass fluxes and the results are projected onto a flow regime map. Infrared (IR) thermography is used to explore the two-phase characteristic of FC-72 inside the channel instantaneously. Also the single and two-phase heat transfer and pressure drop of porous metal foam which can enhance the cooling capability of low conductive fluid are studied and compared with the performance of the open channel microgap cooler in terms...

URI: http://hdl.handle.net/1903/7446

Appears in Collections: UM Theses and Dissertations
Mechanical Engineering Theses and Dissertations

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Log In to DRUM

UM user

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Directory ID: towen
Directory Password: *********

Log In

Non UM user

New user? Click here to register.

Please enter your e-mail address and password into the form below.

E-mail Address: 
Password: 

Log In

Have you forgotten your password?

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University of Maryland, College Park, MD 20742-7011 (301)314-1328.
Privacy Policy
Please send us your comments.
All Contents
quantum computing; superconducting qubit; Josephson junction; SQUID; decoherence

**Issue Date:** 17-Sep-2007

**Abstract:**
I report measurements of energy relaxation and quantum coherence times in an aluminum dc SQUID phase qubit and a niobium dc SQUID phase qubit at 80 mK. In a dc SQUID phase qubit, the energy levels of one Josephson junction are used as qubit states and the rest of the SQUID forms an inductive network to isolate the qubit junction. Noise current from the SQUID’s current bias leads is filtered by the network, with the amount of filtering depending on the ratio of the loop inductance to the Josephson inductance of the isolation junction. The isolation junction inductance can be tuned by adjusting the current, and this allows the isolation to be varied in situ. I quantify the isolation by the isolation factor r1 which is the ratio of the current noise power in the qubit junction to the total noise current power on its bias leads. I measured the energy relaxation time T1, the spectroscopic coherence time T2* and the decay time constant T' of Rabi oscillations in the Al dc SQUID phase qubit A...

**URI:** [http://hdl.handle.net/1903/7469](http://hdl.handle.net/1903/7469)

**Appears in Collections:**
- UM Theses and Dissertations
- Physics Theses and Dissertations

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Restricted Access

At the request of the author, this file is not available online until September 01, 2008. For more information on the availability of this file, please contact DRUM Help at drum-help@umd.edu or +1 301 314-1328.
Embargo Process

- Form submitted to Grad School
- Four options
  - allow immediate access
  - 1-year embargo
  - 6-year embargo
  - permanent embargo
- Must be signed by faculty advisor
- Supplemented by 2-page info sheet
## UM Embargo Statistics

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<th>Percent</th>
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<td>47</td>
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<td><strong>Spring 2007</strong></td>
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<td><strong>Summer 2007</strong></td>
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<td>53</td>
<td>26</td>
<td>79</td>
<td>27%</td>
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<td><strong>TOTALS</strong></td>
<td>955</td>
<td>179</td>
<td>95</td>
<td>274</td>
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## Embargoes by College

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<td>58</td>
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<tr>
<td>Ag &amp; Natural Res</td>
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<td>7</td>
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<tr>
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<td>3</td>
<td>3</td>
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<td>Arts &amp; Humanities</td>
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<td>9</td>
<td>23</td>
<td>19%</td>
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<td>4</td>
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<td>Comp, Math &amp; Phy Sci</td>
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<td>3</td>
<td>28</td>
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<td>Education</td>
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<td>11</td>
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<td>Public Health</td>
<td>35</td>
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<td>5</td>
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<td>Public Policy</td>
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<td>2</td>
<td>1</td>
<td>3</td>
<td>27%</td>
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ILL Requests

- Embargoed ETDs available via ILL
- But **NOT** the electronic version
- Developed new process to print and mail documents
- Nine requests from Sept-Nov

**FUTURE:**

- ILL electronic copy
- Allow campus access to embargoed ETDs
Special Cases – Copyrighted Works

- Works of visual or theatrical art, dance or music performances
- Art or architectural images
- Complete document must be submitted in print or on CD / DVD
- Redacted version submitted electronically for inclusion in DRUM
- Student adds “disclaimer” to front matter
- Note added to DRUM record that the complete version is available in the library
Preservation

- Nightly incremental backups, multiple sites
- UM print copy is current archive copy
- Move to archive digital format only

Issues to address:
- Preferred formats / migration plans
- Develop levels of support for formats
- Have hardware and software systems in place to support plan
In Summary...

- ETDs require regular attention
- Build a good relationship with the Graduate School
- Important to educate faculty advisors and students about open access issues
- Be prepared to implement embargoes
- Link ETDs to library catalog
- Keep your cataloging department informed
- Have plans in place for special cases (copyrighted works)
- Establish preservation policies and procedures
- Efficient and capable IT department
Questions?

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