

3rd EuroADWorkshop, Oxford, June 1, 2006

## Applications on [www.autodiff.org](http://www.autodiff.org)

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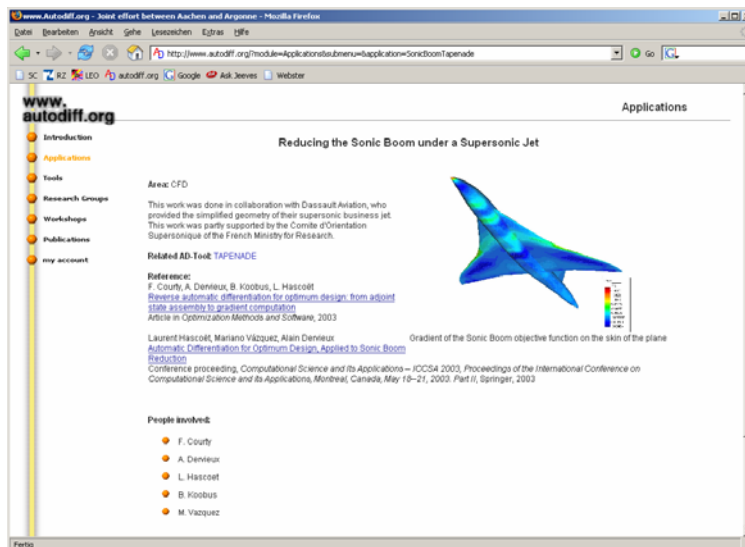
<http://www.sc.rwth-aachen.de>

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## From CFD



The screenshot shows a web browser window displaying the website [www.autodiff.org](http://www.autodiff.org). The page title is "Joint effort between Aachen and Argonne - Mozilla Firefox". The browser address bar shows the URL <http://www.autodiff.org/module=Applications&submenu=Application=SonicBoomTapenade>. The website content includes a navigation menu on the left with items like Introduction, Applications, Tools, Research Groups, Workshops, Publications, and my account. The main content area is titled "Applications" and features a sub-header "Reducing the Sonic Boom under a Supersonic Jet". Below this, there is a section for "Area: CFD" with a 3D visualization of a supersonic jet's skin showing a color gradient representing the objective function. The text describes the collaboration with Dassault Aviation and the support from the French Ministry for Research. It also lists references and people involved in the project.

**Area: CFD**

This work was done in collaboration with Dassault Aviation, who provided the simplified geometry of their supersonic business jet. This work was partly supported by the Comité d'Orientation Supersonique of the French Ministry for Research.

**Related AD-Tool: TAPENADE**

**Reference:**  
F. Cousty, A. Denieux, B. Klobus, L. Hascoett  
[Reverse automatic differentiation for optimum design from adjoint state assembly to gradient computation](#)  
Article in Optimization Methods and Software, 2003

Laurent Hascoett, Mariano Vázquez, Alain Denieux  
[Automatic Differentiation for Optimum Design, Applied to Sonic Boom Reduction](#)  
Conference proceeding, Computational Science and its Applications - ICCSA 2003, Proceedings of the International Conference on Computational Science and its Applications, Montreal, Canada, May 19-21, 2003, Part I, Springer, 2003

**People involved:**

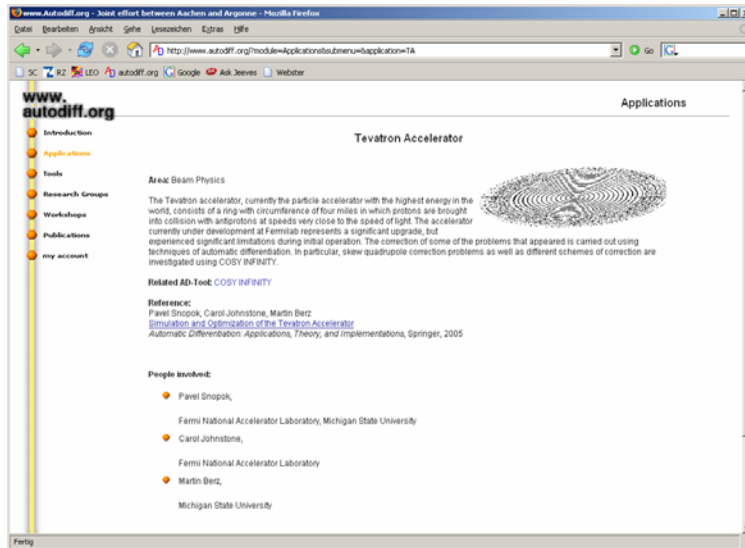
- F. Cousty
- A. Denieux
- L. Hascoett
- B. Klobus
- M. Vázquez

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# From Physics

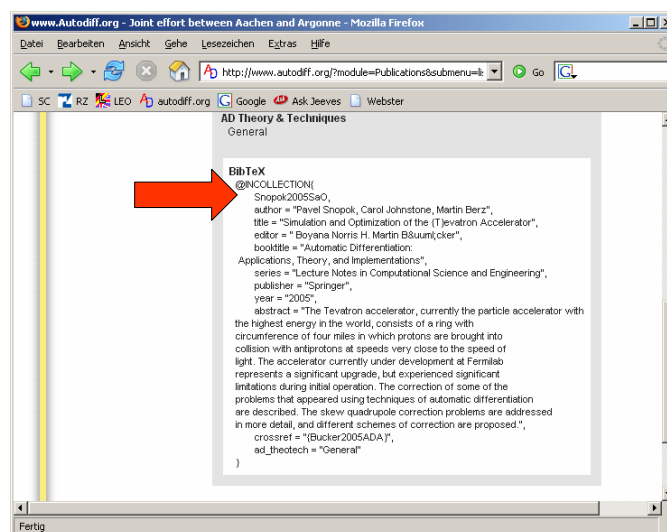


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# Step 0: Remember BIBTEX Key



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## Step 1: Get an Account

The screenshot shows a web browser window displaying the 'my account' page on www.autodiff.org. The page has a navigation menu on the left with items: Introduction, Applications, Tools, Research Groups, Workshops, Publications, and my account. The main content area is titled 'my account' and contains the following information:

- Registered users have the possibility to:**
  - Submit applications of AD technology
  - Submit AD Tools
  - Modify entries in the BibTeX-database
- In order to create a developer account for you, we need some information:**
  - Username of your choice (max. 10 chars):** The username should contain only alphanumeric characters. You will be notified if the name you chose is already given. Input field:
  - Your real name or the name of your group:** Input field:
  - The name / location of the institution or company you are working for:** Input field:
  - Your email address:** This is where your password will be sent to, and where we can reach you if we have questions concerning your login. Input field:
- This information will be sent to the webmaster of autodiff.org by email, who will check your request and finally activate your account.
- You can add a further comment to this email,

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## Step 2: Enter Data via Web

The screenshot shows a web browser window displaying the 'add application' form on www.autodiff.org. The page has a navigation menu on the left with items: Introduction, Applications, Application Howto, Tools, Research Groups, Workshops, Publications, my account, and Log out. The main content area is titled 'add application' and contains the following information:

Please enter as much information about your application as possible

- Application title (required):**
- Upload image (optional):**
- Area (required):**
- Summary (required, simple LaTeX allowed):**
- Tool (required):**
- References (optional, Format: BibTeX):**

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## Editing your Data

- Via WWW
- Via XML-File
  - ◆ Download XML-File
  - ◆ Edit XML-File
  - ◆ Upload XML-File

Give us a try!

## Reasons for traveling to Aachen



## Charlemagne Prize of Aachen?

- Citizens' Prize for Services to European Unity



- 2006 Jean-Claude Juncker
- 2000 Bill Clinton
- 1999 Tony Blair

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## Cathedral?



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# Weather?



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# Alemannia Aachen?



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## Typical Aachen Gingerbread "Printe"



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## Christmas Market (24.11.-22.12.06)



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## 4th EuroAD Workshop

- 7.-8.12.06 (Thursday/Friday)
- Aachen, Germany
  
- Details for traveling (including online hotel booking): [www.aachen.de](http://www.aachen.de)

