


**PUBLIC VIRTUAL ENVIRONMENTS**

with Daniel Sandin, Louis Kauffman, Chris Hartman, Glenn Chappell. *Air on the Dirac Strings. 2.0’ video in Electronic Theater, SIGGRAPH’93.*


with Dan Sandin, Milana Huang, Lou Kauffman, Joanna Mason. *Getting Physical in Four Dimensions. CAVE - Virtual Reality Room, SIGGRAPH’94*


**Funded and Unfunded Synergistic Activities:**

Teaching college since Notre Dame summerschool, 1957.


Eisenhower grants for inservice teacher training, eighties and early nineties.

Taught Math 198 “Hypergraphics” freshman honors seminar in geometrical computation for the Campus Honors Program, (1990-2006).

 Developed many undergraduate and graduate courses, chiefly for teachers training. Campus AMOCO award for excellence in undergraduate teaching (1994).

With Umesh Thakkar, 3 year summer REU programs “Audible Sketchpad for the CAVE” under NCSA PACI program, Award REU98-001.


THESIS AND POSTDOCTORAL ADVISOR:

Prof. Charles Titus, Mathematics, University of Michigan.

RECENT COLLABORATORS:
Bernard, Ben (Amazon.com), Peter Brinkmann (CUNY), Jim Crowell (ISL UIUC), Camille Goudeseune (ISL UIUC), Chris Hartman (U Alaska), Hank Kaczmarski (ISL UIUC), Stuart Levy (NCSA UIUC), Paul McCreary (Evergreen College), Tony Robbin (New York), Benjamin Schaeffer (New York), John M. Sullivan (TUB Berlin), Jeffrey Weeks (Canton, NY).

RECENT PH.D. STUDENTS/POSTDOCS:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Degree Year</th>
<th>Research Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexei Bourd</td>
<td>Qualcomm, San Diego, CA</td>
<td>Ph.D. 2003</td>
<td>differential equations</td>
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<tr>
<td>Paul McCreary</td>
<td>Evergreen College, WA</td>
<td>Ph.D. 1998</td>
<td>mathematical visualization</td>
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