

[Home](#) > [ETDS](#) > [DISSERTATIONS](#) > [AAI3110473](#)

Off-campus UMass Amherst users: To download dissertations, please use the following link to [log into our proxy server](#) with your UMass Amherst user name and password.

Non-UMass Amherst users, please click the view more button below to purchase a copy of this dissertation from Proquest.

(Some titles may also be available free of charge in our [Open Access Dissertation Collection](#), so please check there first.)

Topics in gravity and supergravity

[View More](#)

[Hyunji Cho, University of Massachusetts - Amherst](#)

[SHARE](#)

Abstract

In the first part of the thesis we study the formation of non-singular black holes in the collapse of magnetic monopoles. We employ a thin shell approximation model for a gravitating magnetic monopole in which a false vacuum deSitter interior is matched to a Reissner-Nordström exterior. In the second part of the thesis we study solutions of $D = 11$ supergravity that correspond to M -branes wrapping supersymmetric cycles of Calabi-Yau manifolds. In the final chapter of the thesis we focus on the condition imposed by supersymmetry on the Kähler form of the Calabi-Yau manifold.

^

Subject Area

Physics, Elementary Particles and High Energy

Recommended Citation

Hyunji Cho, "Topics in gravity and supergravity" (January 1, 2003).
Doctoral Dissertations Available from Proquest. Paper AAI3110473.
<http://scholarworks.umass.edu/dissertations/AAI3110473>

Enter search terms:

[Notify me via email or RSS](#)

Browse

[Collections](#)

[Disciplines](#)

[Authors](#)

Author Corner

[For Authors](#)

[Author FAQ](#)

Links

[UMass Amherst Libraries](#)

[UMass Amherst](#)

[Contact Us](#)

This page is sponsored by the [University Libraries](#).

© 2009 [University of Massachusetts Amherst](#) • [Site Policies](#)