

# DRAGON DISTRIBUTION

by

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## Introduction

The computer code DRAGON contains a collection of models that can simulate the neutron behavior of a unit cell or a fuel assembly in a nuclear reactor and includes all of the functions that characterize a lattice cell code. It contains a multi-group iterator conceived to control a number of different algorithms for the solution of the neutron transport equation. Each of these algorithms is presented in the form of a one group solution procedure where the contributions from other energy groups are included in a source term. The current version of DRAGON contains three such algorithms. The most versatile module corresponds to the EXCELL option which solves the integral transport equation using the collision probability method for general 2--D geometry and for three dimensional (3--D) assemblies. The execution of DRAGON is controlled by the generalized 'GAN' driver. It is modular and can be interfaced easily with other production codes.

## Distribution

The current version of DRAGON available is version 3.04 that was released April 1, 2000. Since, then various minor errors were detected and corrected and Revision D now contains the most up-to-date version of the code. DRAGON is freely available from École Polytechnique de Montréal on the web site:

<http://www2.polymtl.ca/nucl/DRAGON/index-En.html>

where one will find the source code for DRAGON as well as the associated documentation. It is also possible to download DRAGON directly from the our anonymous ftp site:

<ftp://ftp.polymtl.ca/pub/nucl/dragon/dragon-3.04/DRAGON.TGZ>  
<ftp://ftp.polymtl.ca/pub/nucl/dragon/dragon-3.04/REVISION304D.TGZ>

This distribution contains all the instructions necessary to install and run DRAGON on the following Unix based computers:

- IBM work-stations
- HP work-stations
- PC running Linux

This version is not adequate for users that intend to install and run DRAGON on a PC under Windows. First, a FORTRAN version of the SETARA subroutine compatible with Compact FORTRAN is required. In addition, the compilation options must be selected carefully. This information is only available upon request (see DRAGON contact below).

## Contacts and Authors

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