

AREA	CÓDIGO	Ciemat	CSN	FFAA	ENUSA	GNF	Iberdrola	Norca	SEA	Tecnatom	Thunder	UNED	UPC	UPM	UPV
1 Procesamiento Librerías Secciones eficaces	NUOY														
	TRPOLI														
	MCONP														
2 Monte Carlo	PHYS														
	FLUKA / GEANT														
	RENO / SCALE														
	RENELODR														
	SERPENT														
3 Inventario Isotópico y Activación	DARWIN														
	ORIGEN / SCALE														
	ACAB														
	MONTEBURNS														
	TRITON/SCALE														
4 Celda-Elemento	EVOLCODE														
	APOLLO														
	DRAGON														
	CASMO														
	HEAP-TE														
5 Cinética 3D Núcleo	WING-MAN														
	SCALE														
	NEW7/SCALE														
	PARCS														
	COBAYAR														
6 Termohidráulica Subcanales	SIMULATE														
	SIMTRAN/SEANAP														
	ANC														
	PANACEA														
	VALBIN														
7 Termohidráulica CFD	VALKIR-FVM														
	FILICA-ONAP														
	COBRA-3C														
	SUBCHANNEL														
	VIPERIN														
8 Termohidráulica Sistema	COBRA-TP														
	ANYS-CFX														
	FLUENT														
	STAR-CCM+														
	OPEN FOAM														
9 Sensibilidad e Incertidumbres	GATHEME														
	RELAP														
	WATKIN-SYS														
	TRAC														
	TRAC3														
10 Combustible-Termomecánica	LOFTTRAN														
	TRAC3														
	TRICR														
	ECCOSMPRO														
	GASAP														
11 Contención	URS/PCCIRC														
	DAKOTA														
	SUNSET														
	MONTEBURNS-3AS														
	TRAPCON-3														
12 Accidentes Severos	FRAPTRAN														
	SCANARK														
	FALCON														
	OSTRM														
	PRIME														
13 Daño por Irradiación	PI3D														
	TRED														
	CONTAIN														
	GOthic														
	ASTEC														
14 Evaluación Emplazamiento, Dosis Ambiental	MELCOR														
	MAAP / ESCAP														
	SIAS														
	PERFECT / GETMAT														
	MOCASIK														
15 Analisis Probabilista Seguridad	BIGMAC														
	SESTA														
	LAMBPI3														
	DO3D														
	CONRADIS														
16 Cálculo de Blindajes	IBSC														
	GASPAN/AOTAP/KODODOQ														
	MMS-FLEXPART														
	MACCS2														
	PC-CREAM														
17 Sistemas de apoyo a emergencias	COFIMA														
	DIAIMOS														
	RADTRAD														
	RESRAD														
	DOGALI														
18 Ciclo del Combustible	INDAC														
	POSTRAD														
	CASOP														
	WORKSPECTRUM														
	SAPHIRE														

NOTA: La intensidad de los colores indica grado de experiencia creciente en uso, conocimiento y capacidad de desarrollo de los códigos.



CEIDEN

Grupo Español de Simulación Integral de Reactores Nucleares (SIREN)

Catálogo de Códigos de Cálculo utilizados por el sector nuclear español

(rev.1, junio 2019)

La Plataforma Tecnológica de I+D de Energía Nuclear de Fisión, CEIDEN, ha llevado a cabo una recopilación de los códigos de cálculo que son usados, implementados, y/o desarrollados por las organizaciones del sector nuclear español.

Los códigos incluidos en la recopilación son, básicamente, los utilizados en la simulación del núcleo de los reactores, y en la simulación de la seguridad de las plantas nucleares. En general, no se han incluido códigos utilizados en otras especialidades, tales como los de diseño mecánico o eléctrico.

En la tabla aparecen exclusivamente las organizaciones que han participado en esta tarea recopilatoria, de manera que no incluye información correspondiente a aquellas que no lo han hecho. Dicha información podrá ser incorporada en próximas versiones de este documento.

[Responsable de la recopilación: Carolina Ahnert (UPM)]



CEIDEN

PLATAFORMA TECNOLÓGICA DE ENERGÍA NUCLEAR DE FISIÓN

EN

AREA	CODE	Ciemat	CSN	EEAA	ENUSA	GNF	Iberdrola	Norca	SEA	Tecnatom	Thunder	UNED	UPC	UPM	UPV																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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The color darkness indicates the experience grade in use, implementation and development of the codes.



CEIDEN

Spanish Group of Integral Simulation of Nuclear Power Plants (SIREN)

Catalog of simulation codes used by the Spanish Nuclear Sector

The Spanish Technology Platform of Fission Nuclear Energy, CEIDEN, has carried out a collection of calculation codes that are used, implemented, and / or developed by the Spanish nuclear sector organizations

The codes included in the collection are basically those used in the simulation of the reactor core, and the safety analyses of nuclear power plants. Simulation codes used in other fields, such as mechanical or electrical design are not included, in general.

The table shows only the organizations that have participated in this compilation, so that does not include information corresponding to those which have not participated. Such information may be incorporated into future versions of this document.

[Responsible for collecting: Carolina Ahnert (UPM)]

