## Subject: 4/6-dimensionI numerical integration? Posted by Arne Gennerich on Tue, 08 Oct 2002 10:20:38 GMT

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Hi Folks!

Who can provide me IDL-functions which can calculate 4- and 6-dimensional numerical integrals?

Best Arne

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Subject: Re: 4/6-dimensionI numerical integration?
Posted by Arne Gennerich on Fri, 11 Oct 2002 17:04:34 GMT
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## Craig Markwardt wrote:

- > Arne Gennerich <agenner@gwdg.de> writes:
- >> Hi Folks!
- >>

>

- >> Who can provide me IDL-functions which can calculate 4- and
- >> 6-dimensional numerical integrals?
- > Probably you will have to provide it for yourself. I have wanted to
- > make an extension to my QUADPACK integrator to support
- > multi-dimensional integrals, but haven't gotten around to it yet. If
- > your integration hypervolume is rectangular then it is pretty trivial.
- > However, when you get to high enough dimensions, you probably want to
- > use Monte Carlo, no?
- >
- > Craig
- >

Thanks Craig for your answer! Probably the Monte Carlo Integration is a good suggestion. Is the random number generator RANDOMN usefull for this approach? Any experience?

Best Arne

--

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Subject: Re: 4/6-dimensionI numerical integration?
Posted by Craig Markwardt on Fri, 11 Oct 2002 18:48:41 GMT
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Arne Gennerich <agenner@gwdg.de> writes:

> Craig Markwardt wrote:

>

- >> Arne Gennerich <agenner@gwdg.de> writes:
- >>> Hi Folks!

>>>

- >>> Who can provide me IDL-functions which can calculate 4- and
- >>> 6-dimensional numerical integrals?

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- >> Probably you will have to provide it for yourself. I have wanted to
- >> make an extension to my QUADPACK integrator to support
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- >> your integration hypervolume is rectangular then it is pretty trivial.
- >> However, when you get to high enough dimensions, you probably want to
- >> use Monte Carlo, no?

>>

>> Craig

>>

>

- > Thanks Craig for your answer! Probably the Monte Carlo Integration is a good
- > suggestion. Is the random number generator RANDOMN usefull for this approach?
- > Any experience?

problems with non-randomness in those routines in the past.	
Craig	
Craig B. Markwardt, Ph.D. EMAIL: craigmr Astrophysics, IDL, Finance, Derivatives   Remove	net@cow.physics.wisc.edu "net" for better response

I am satisfied with RANDOMN and RANDOMU, but I have not subjected it to the torture tests that statisticians would. There have been