
Subject: tensor multiplication

Posted by [Daniel Luebbert](#) on Wed, 17 May 2000 07:00:00 GMT

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Hi,

does anybody out there know an efficient and elegant way (i.e., without for-loops) to implement a tensor multiplication in IDL?

What I mean is this:

IDL can do a matrix multiplication, e.g. if I do

```
c = indgen(3,4)
```

```
d = indgen(4)
```

then for

```
help, c#d
```

I get

```
LONG ARRAY[3],
```

and that's what I expect.

But now, when I take one more dimension, like

```
c = indgen(2,3,4)
```

```
d = indgen(4)
```

then

```
help, c#d
```

gives an error! (incompatible matrix dimensions...).

What a would like to get is obviously an

```
ARRAY[2,3]
```

Does anybody know how?

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