

**iccoil**

The coil geometry, in real space, is determined.

---

[called by: [oculus:bs00aa](#).]

**contents**

<b>1 iccoil</b>	<b>1</b>
1.1 overview . . . . .	1

**1.1 overview**

2. The coils are assumed to be closed (i.e. periodic), one-dimensional loops embedded in three-dimensional space, with position described by  $\mathbf{x}(t) \equiv x(t)\mathbf{i} + y(t)\mathbf{j} + z(t)\mathbf{k}$ , with the arbitrary curve parameter  $t \in [0, 2\pi]$ , and  $\mathbf{x}(t + 2\pi) = \mathbf{x}(t)$ ,
2. Presently, a Fourier representation is assumed, e.g.

$$x = \sum_{n=0}^N x_{n,c} \cos(mt) + \sum_{n=1}^N x_{n,s} \sin(mt), \tag{1}$$