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Memo for Monday weekly ILC meeting

## Results from IBS calculations for ATF done in BMAD

The purpose of this memo is to show that the IBS calculations being done in BMAD agree with those given in table II of reference [1].

In the table below are numbers from KMW<sup>[1]</sup> and BMAD. The BMAD calculations were done on ATF lattice "ATF.drlbw44.xsif".

Definitions:

~~Method 1: Compute average beta and eta functions of lattice and plug into formula.~~

Method 2: Sum rates for each element around the lattice and normalize.

Source	Method	Equation	1/Ti		
			h	v	s
KMW <sup>[1]</sup>	2	CIMP	298	7.47	449
BMAD	2	CIMP	283	6.73	440
KWM <sup>[1]</sup>	2	Bane	291	-	435
BMAD	2	Bane	274	-	425

[1] K. Kiyoshi, S. Mtingwa, A. Wolski, "Intrabeam scattering formulas for high energy beams" Phys. Rev. ST Acc. Beams. 8,08001 (2005)