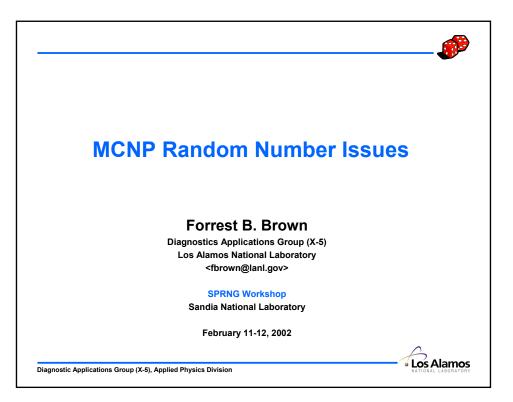
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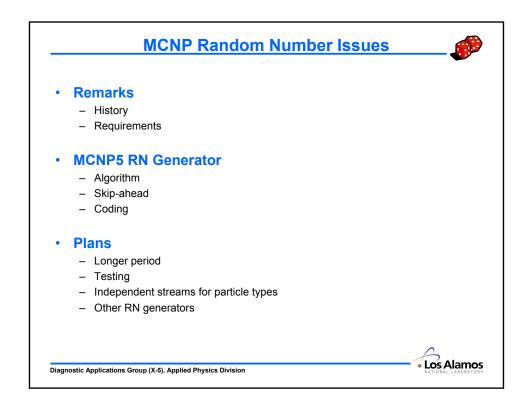
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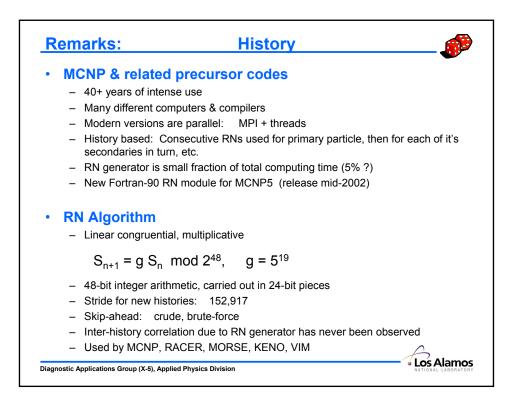
Title:	MCNP RANDOM NUMBER ISSUES
Author(s):	Forrest B. Brown
Submitted to:	SPRNG Workshop February 11-12, 2002 Sandia National Laboratory Albuquerque, NM

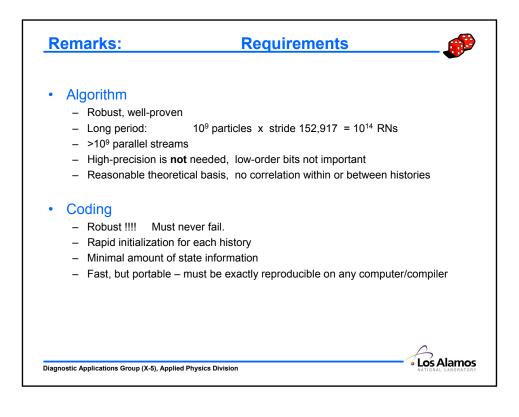


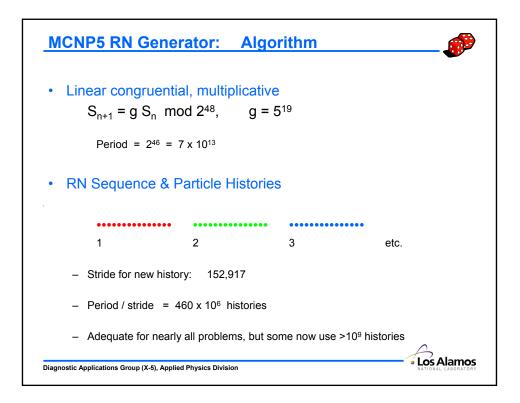
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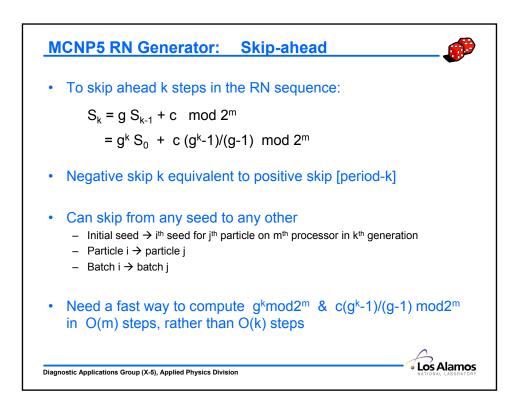


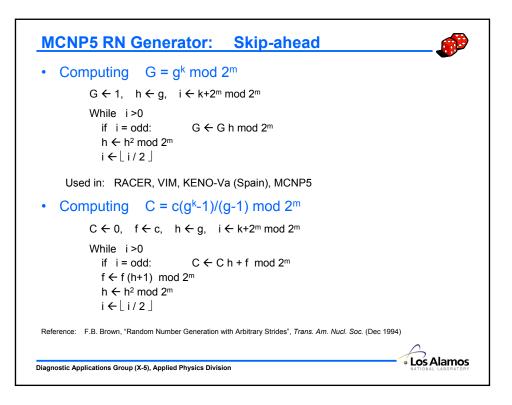


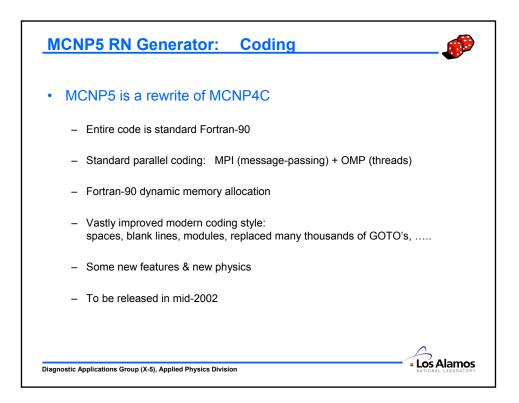


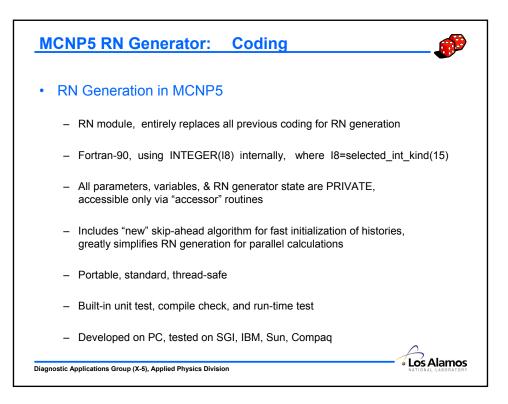












MCNP5 RN Generator:	Coding	
Module mcnp_random		
integer(I8), PRIVATE, SAVE :: & RN_MULT = FIVE**19, & RN_MASK = TWO**48-1,	& & ! multiplier & ! mask, to get lower 48 bits	
real(R8), PRIVATE, parameter :: & RN_NORM = 1.0_R8/TWO*	& ! norm. to (0,1)	
! Private data for a single particl	e	
	RN_SEED, RN_COUNT, RN_NPS RN_SEED, RN_COUNT, RN_NPS	
function rang() ! MCNP5 random number generator		
<pre>implicit none real(R8) :: rang</pre>		
RN_SEED = iand( RN_MULT*RN_SEED, rang = RN_SEED * RN_NORM RN_COUNT = RN_COUNT + 1	RN_MASK )	
return end function rang	<u>^</u>	
2		



