

# *Beams Week in Review*

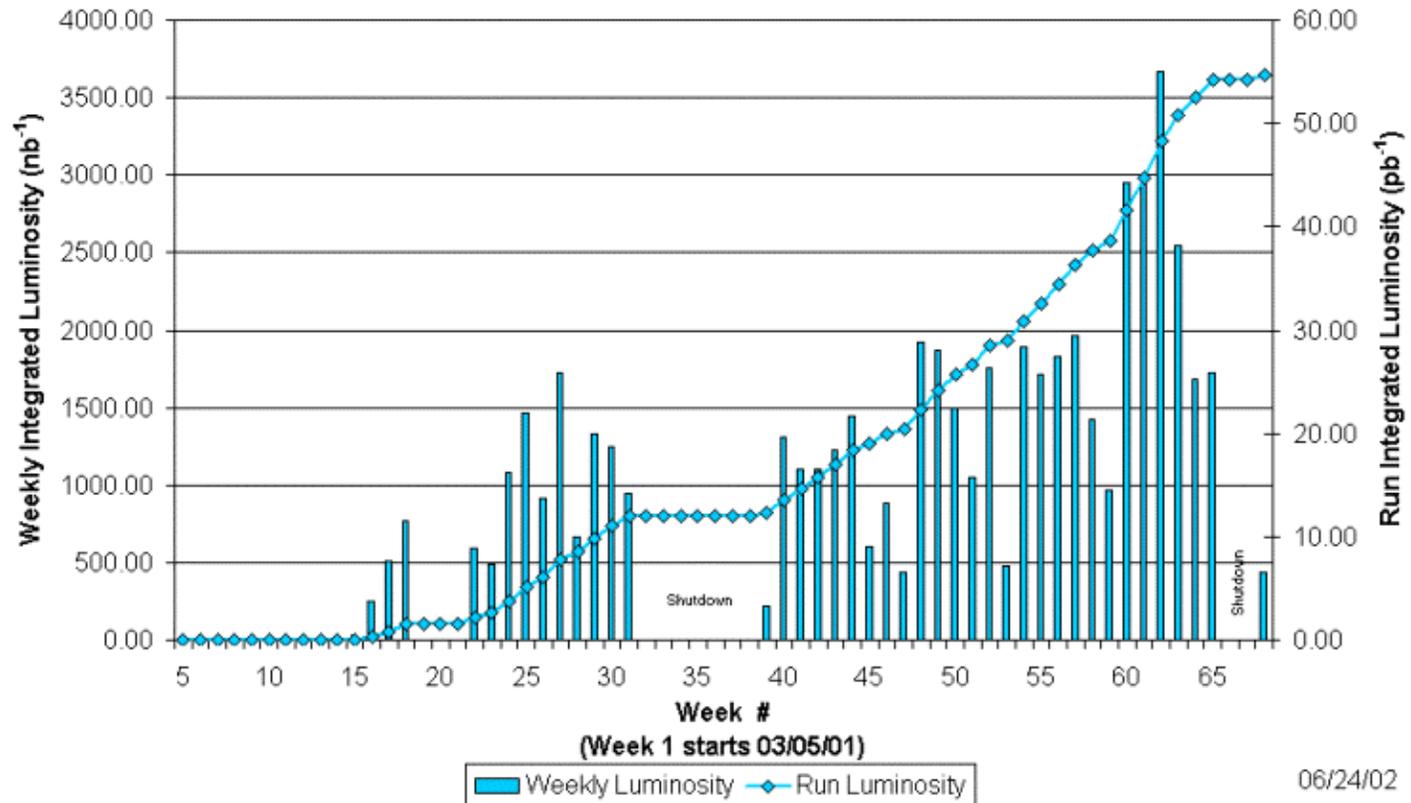


- Still Starting up
  - working towards pre-shutdown luminosity
- Uncorrelated failures

# Integrated Luminosity



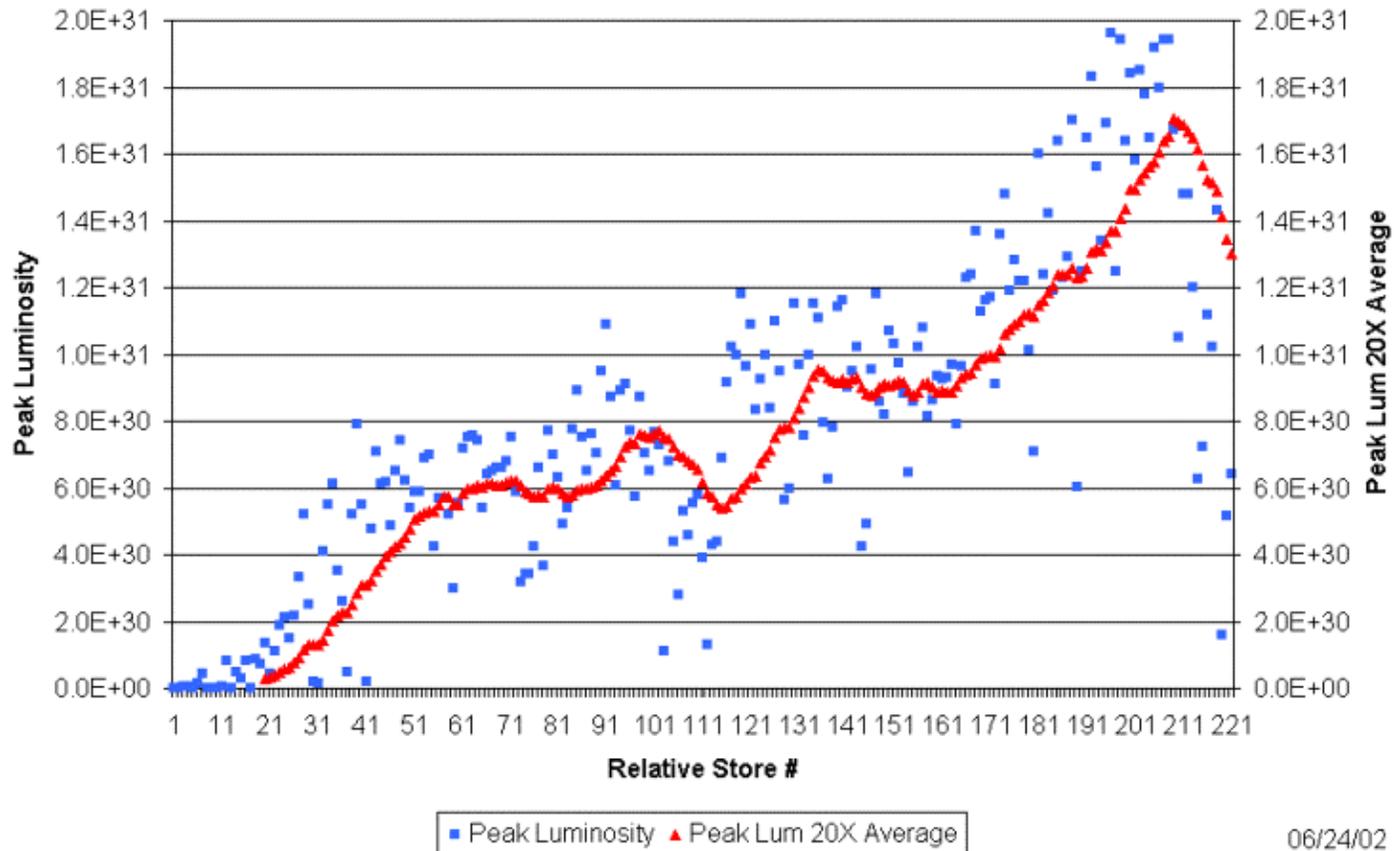
Collider Run IIA Integrated Luminosity



# Peak Luminosity



Collider Run IIA Peak Luminosity



06/24/02

# Store Summary



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<u>Store #</u>	<u>Initial Luminosity</u>	<u>Duration</u>	<u>Termination</u>	<u>comments</u>
1434	1.64 E30	7.6 hours	intentional	Large emittance/beam loss, lost pbar shots
1443	5.14 E30	14.67	intentional	Lost pbar shots Reduced proton intensity
1448	6.45 E30	4.83	quench at A3	1-hour proton lifetime, low proton intensity

# *Tevatron Summary*



- F4 Wet engine off much of Monday
- Luminosity limited by
  - large emittances
  - beam loss during acceleration
  - HV703 load transfer switch
- Angle bump to open up F0 aperture
- Coupling

# *Pbar Summary*



- Core cooling equalizers in design
  - Next week?
  - 40% improvement in cooling rate now
  - 125% improvement with equalizers
- Improved Core and AP3 emittances

# *MI Summary*



- Running okay
- Flying wire/multiwire issues
- Q847/MI8 lattice
- HV703 load transfer switch
- 8 GeV coalescing

# *Schedule for this Week*



- Five shifts of Tevatron studies to restore luminosity
  - Possible access
  - Coupling
  - Injection
  - Lifetime
  - Aperture

# *Schedule for this Week*



- Pbar studies
  - Unstacking lattice
  - Beam line matching with new lattice
- Parasitic
  - MI8 line/Q847
  - Recycler protons
  - MiniBooNe

# Schedule for this Week

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Update 6/24/02 2:24 PM	MONDAY 6/24/02	TUESDAY 6/25/02	WEDNESDAY 6/26/02	THURSDAY 6/27/02	FRIDAY 6/28/02	SATURDAY 6/29/02	SUNDAY 6/30/02
<b>Owls 0000 to 0300</b>		Store	Tev Store  <b>Pbar</b> parse lattice, beam line matching, measure eta	<b>Tev</b> -coupling on Helix(@150gev)  <b>Pbar</b> Unstacking lattice	<b>Shot setup</b>	Stack and store	→
<b>DAYS 0300 to 1600</b>	Fix HV703 Mi8 lattice work  Shot setup (tev bumps @ CDF 150 gev)	NTF-PT  Store/shot  <b>Pbar</b> Pbar access to fix shunt after shot	NTF-PT <b>Tev</b> -Access??? look at d17 coll. Rad survey at FD As found of a49 quads  <b>Pbar</b> Unstacking lattice	<b>Tev</b> -coupling on ramp  <b>Pbar</b> stack	NTF-PT Stack and store	→	→
<b>EVES 1600 to 2400</b>	store	<b>Tev</b> store  <b>Pbar</b> Reverse protons decouple extraction orbit	<b>Tev</b> -FU aperature scan -Pbar inj lifetime -Proton life time on helix.(@150 gev <b>Pbar</b> Unstacking lattice	Tev -damper studies (@150 gev) -36x0 store  <b>Pbar</b>	Stack and store	→	→

Schedule can be found at <http://www-bd.fnal.gov/operations/schedules.html>