

# HTS BEARING FOR THE FLYWHEEL ENERGY STORAGE

## 902A Conference Room

<b>Subject:</b>	Flywheel Program	<b>Date:</b>	September 12 <sup>th</sup>
<b>Facilitator:</b>	Lift	<b>Start Time:</b>	9:00am
<b>Location:</b>	Brookhaven National Laboratory, Upton, NY		
<b>Attendees</b>	Ramesh Gupta, Peter Wanderer, Michael Anerella, William Sampson, Lakshmi Lalitha, Ken Bauer, Ron Pirich, Gary Provenzano, Nelson Rivas, Robert Sterff		

Time	Topic	Comments
	<b>Introduction of Attendees</b>	
9:00-9:10	1. BNL	Ramesh Gupta, Peter Wanderer
9:10-9:15	2. Lift	Ken Bauer
9:15-9:25	3. Matrix Railway	Nelson Rivas
9:25-9:45	4. Temes GmbH a. Avanco GmbH b. ESW GmbH c. FEAAM GmbH	Robert Sterff, Gary Provenzano
9:45-10:30	5. BNL Tour	Ramesh Gupta
<b>Technical Discussion</b>		
10:30-10:50	6. Flywheel Concept a. Mechanical Design Concept b. Rotor Configuration c. HTS Bearing Concept d. Cooling System i. Heat Pipes ii. Cryocooler iii. Thermo-Electric Cooler	Nelson Rivas
10:50-11:15	7. Flywheel Construction a. Rail-KERS for vehicle braking b. Determine the optimized capacity and the limiting factors. c. Motor Configuration d. Carbon Fiber Construction e. Control and Regulation f. Safety	Robert Sterff
11:15-12:00	8. HTS Bearings a. HTS Advancements at BNL b. Technological Capabilities	Ramesh Gupta
12:00-12:45	<b>Lunch</b>	
12:45-1:15	Flywheel Market Overview 1. Present Market Application 2. Return on investment 3. Other Market Opportunities	Gary Provenzano
1:15-1:45	Grant Discussion	Ken Bauer
1:45-2:45	Next Steps	Open Discussion