

## HARNESS THE CROWD

### INVESTMENT SCIENCE



We use artificial intelligence tools, combined with the latest chaos and complexity science, to build unique investment models.

### PERFORMANCE

Our goal is to give the professional manager a significant edge over the competition.

### CONFIDENCE

Our unique ExtremeHurst crowd-effect model will give you the confidence to pull the trigger.

### EXPERIENCE

Parallax has been helping professional traders and managers increase performance since 1990. We can analyze your methodology and create overlays or new investment models.

### CONTACT US

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**E**xtrêmeHurst is a quantitative detector of extreme investor behavior that signals the beginning or end of a trend. It answers the question of WHEN to act. Strong trend-persistent stock price movements are evidence of positive feedback (i.e., investors buying because the price is rising, driving prices higher), while extremes of mean reversion are evidence of negative feedback. Extremes of both trend persistency and mean reversion, quantified via multiple measurements of the Hurst exponent, were found to precede significant reversals and breakouts. When all investors believe the same thing at the same time, a transition occurs. ExtremeHurst signals are fully characterized by the presence of discrete scale invariance, accelerating price, log-periodic cycles, and volume anomalies. This App allows the user to search global markets for signals on daily, weekly, monthly, and quarterly time scales. Signals persist for up

to 20 time periods into the future. Auction markets are feedback systems. Understanding the theoretical characteristics of these systems has enabled Parallax to build better predictors than has previously been possible. Parallax uses neural networks throughout its products to dynamically weight the importance of each predictor, so a final buy/hold/sell forecast can be generated in a consistent manner and with scientific objectivity. President S. Kris Kaufman spent 13 years as a senior staff geophysicist for Sierra Geophysics. His projects included non-linear inversion modeling of nuclear explosions and writing the first commercial 3D wave propagation software for oil exploration.

## APPS EHURST <GO>

### SELECT SECURITIES



Choose securities to search from either a Bloomberg portfolio, the holdings of an index, a securities text file, a country, or a region.

### SELECT TIME SCALE

Search for signals on scales from daily to quarterly. Quarterly signals may last as long as 5 years !

### SEARCH THE WORLD

Bloomberg data covers the entire world, and so do we. Search any exchange and any security for our unique ExtremeHurst signals.

### MAKE A CHARTBOOK

Each signal chart may be saved for later printing and review in a convenient Chartbook.

### BLOOMBERG LINKS

Right click on any signal and link seamlessly to Bloomberg analysis tools.

The screenshot shows the ExtremeHurst software interface. At the top, it displays the Parallax Financial Research, Inc. logo and the ExtremeHurst™ name. Below the logo are several filter panels: LOCATION (Securities File, Index Holdings, Client Portfolio, United States, UK, Japan, China), SECURITY (Equity, Commodity, Currency, Index, ETFs), TIME SCALE (Quarterly, Monthly, Weekly, Daily), and FILTERS (Volume Filter, Data Filter, Price Filter, New Signals). A 'Search for Signals' button is visible. Below the filters is a table of signals with columns for Symbol, Exch, Type, Scale, Signal, Rank, Forecast, Valid From, and Until. The table lists several signals, with the first few having a rank of 94, 93, 97, 93, 92, 99, and 88. Below the table is a price chart for 'EXTREMEHURST™ WEEKLY SCALE EXTENSION BOTTOM SIGNAL ON MELCO INTERNATIONAL DEVELOP. (200 HK EQUITY)'. The chart shows price movement from 1/1/2011 to 1/1/2013, with a signal indicator at the bottom. At the bottom of the interface are buttons for 'Save Signals', 'Copy Signals', 'Clear Signals', 'Print Screen', 'Copy Screen', 'BB Chart', 'Chartbook +', and 'Help'.

Symbol	Exch	Type	Scale	Signal	Rank	Forecast	Valid From	Until	More
53	HK	EQ	WK	Extension Bottom	94	Expect higher prices	2012-05-18	2012-10-05	[X]
53	HK	EQ	WK	Extension Bottom	93	Expect higher prices	2012-05-11	2012-09-28	[X]
200	HK	EQ	WK	Extension Bottom	97	Expect higher prices	2012-07-27	2012-12-14	[X]
267	HK	EQ	WK	Extension Bottom	93	Expect higher prices	2012-05-18	2012-10-05	[X]
525	HK	EQ	WK	Extension Bottom	92	Expect higher prices	2012-06-29	2012-11-16	[X]
525	HK	EQ	WK	Extension Bottom	99	Expect higher prices	2012-06-15	2012-11-02	[X]
763	HK	EQ	WK	Extension Bottom	88	Expect higher prices	2012-07-13	2012-11-30	[X]

**P**arallax Financial Research is a scientific research boutique in Redmond, WA. The firm empowers managers with a distinct edge through its unique fundamental and quantitative financial models. Our models are composed of individual "predictors" which are based on the application of both chaos and complexity theories, and presented in clear visualizations. These predictors are blended into forecasting models using genetically-

enhanced neural networks. Our careful application of these mathematical modeling techniques yields unique and powerful solutions to enhance performance.