# Wahoo War of the Minds 1997

## Round Nine

1. The quantum-mechanical analog of its spin part was first described by Goudsmit and Uhlenbeck in 1925. Eigenstates of the orbital part are described by the letters s, p, d, and f. Classically, it can be described as the product of mass, speed, and distance to an axis of rotation. FTP, what is this quantity whose conservation enables ice skaters to dazzle us with fast spins?

Answer: angular momentum

2. Manjusri personifies wisdom, Kshitigarba (SHEE-tee-gar-ba) helps the dead, Avalokitesvara (a-VAH-loh-keets-VAHR-a) is also known as the goddess of mercy, and Maitreya waits in the Tushita heaven to be reborn as a messiah. Along with the arhant and pratyeka, it is the third of the traditional ways of achieving enlightenment. FTP, identify this term, which is used to describe anyone who could enter nirvana, but who stays behind to help others achieve perfection, such as Gautama Buddha.

Answer: bodhisattva

3. It records the journey of the author and his cousin, Quincy Adams Shaw, from April to September of 1846. They hear of a war between the Sioux, led by "The Whirlwind," and the Snakes, but are disappointed when it is called off, and the author abandons Shaw to join an Oglala hunting trip. FTP, identify this historical narrative, written by Francis Parkman and taking its name from the path he took from St. Louis to Fort Laramie.

Answer: The Oregon Trail

4. It first appeared in 1849, following the signature on the *Girlhood of Mary Virgin*. Although their Academy exhibition was a great success, the group broke up soon after, as Collison, Woolner, and Hunt moved away. FTP, identify this school of British painting, which thought that the Italian painter whose name they used was overrated, and which included John Everett Millais and Dante Gabriel Rossetti.

Answer: Pre-Raphaelite Brotherhood

5. He invented a new gunpowder and was credited with the development of mezzotint. Taken prisoner at Lemgo during the Thirty Years War, he was imprisoned at Linz before returning to England in 1642. FTP, name this son of Frederick V, the "mad cavalier" who was dismissed after Bristol, ending his three year run as commander of the horse during which he fought at Newbury, Naseby, and Marston Moor.

Answer: Prince Rupert

6. Because his father, Cronus, wanted to hide his affair with the nymph Philyra from Rhea, he slept with her in the form which gave rise to this creature's shape. The husband of Chariclo and father of Endeis, he was poisoned with the blood of the Hydra, and gave his immortality to Prometheus to escape the pain. FTP, identify this archer, healer, and teacher of Asclepius, Achilles, and Jason, the best known of the centaurs.

Answer: Chiron

3. The motion of a particle in Minkowski's space-time describes a curve made up of points, called events. What two-word term describes this curve?

Answer: world line

20. Identify the following novels by Gustave Flaubert for the stated number of points.1. 5 points: Considered Flaubert's masterpiece, the title character of this 1856 work has two affairs, but is still unhappy and kills herself.

Answer: Madame Bovary

2. 10 points: Set during the Second Empire, this novel tells the story of Frederic Moreau.

Answer: Sentimental Education or L'Education Sentimentale 3. 15 points: This 1862 work is set in ancient Carthage.

Answer: Salammbo

7. In 1935, he began to suffer from painful toothaches which led to his death, since he was too poor to see a dentist. After the premiere of his *Five Orchestral Songs* triggered a riot in Vienna, he turned to opera, though he had to put work aside when he joined the Austrian Army in 1914. FTP, name this composer, whose *Lyric Suite* was his first work in the twelve tone style, best known for his two operas, *Lulu* and *Wozzeck*.

Answer: Alban Berg

8. He was reporting on the war for the San Francisco Chronicle when he was captured by the Boers and deported. Returning to America, he began working for The Wave, a magazine which published his The Joyous Miracle, A Man's Woman, The Third Circle, and Moran of the Lady Letty. FTP, identify this American novelist, who died in 1902 after a failed appendix operation, best known for The Pit, The Octopus, and McTeague.

Answer: Frank Norris

9. He changed his name to Frank Cujo in 1983, but changed it again after the release of Stephen King's novel. A middleweight champion in the Professional European Karate Association, he was sued in 1989 for gouging the eye of an extra during a sword fight for the film *Cyborg*. FTP, identify this actor, best known for *Bloodsport*, *Kickboxer*, and this year's *Maximum Risk*, nicknamed "The Muscles from Brussels."

Answer: Jean-Claude Van Damme

10. In humans, they characterize body temperature, urine formation, oxygen consumption, cell division, endocrine secretions, and the sleep cycle. They are built in to the central nervous system, but are influenced by "zeitgebers" such as the Earth's magnetic field and the rising and setting of the sun. When disturbed, they enter "free-running" periods ranging from 21 to 27 hours apiece, but in general operate on a daily cycle. FTP, what are these rhythms, whose name comes from the Latin for "approximately a day"?

Answer: circadian rhythms

11. On March 10, 1952, he overthrew president Prio Socarras, assuming the titles of premier and chief of state, while leaving the presidency vacant. On the eve of elections in 1954, his only opponent, Ramon Grau San Martin, withdrew, and he was declared president. FTP, identify this general, who had served as elected president from 1940 to 1944, and who fled after the capture of Santa Clara on January 1, 1959, leaving Fidel Castro in control of Cuba.

Answer: Fulgencio Batista

12. It was written after Francis Grose asked the poet to write an account, in return for permission to use an engraving of Alloway Kirk in a book. The title character starts out in a tavern with Souter Johnnie, but passes a witches' sabbath on his way home, and is pursued across the bridge of the Doon by Auld Nick himself. FTP, identify this narrative poem of 1791, written by Robert Burns.

Answer: Tam O'Shanter

13. The problem of how domestication arose was addressed in the 1930's by archaeologist Gordon Childe. He suggested that climatic changes after the Ice Age resulted in a drying of the climate, forcing people, plants, and animals into ever smaller regions; this resulted in closer contact between them and to the exploitation of the others by man. FTP, name this early theory, now generally rejected, variously named after either the small regions, the climate change, or the close contact.

Answer: Oasis theory or Propinquity theory or Desiccation theory

14. He was made a brigadier general at the beginning of the War of 1812, and died when a powder magazine exploded during the assault on York. Arrested by the Spanish in Santa Fe, he returned east in 1810, publishing An Account of Expeditions to the Sources of the Mississippi. FTP, identify this explorer, commissioned by James Wilkinson to explore the upper Mississippi, whose second expedition to Colorado and New Mexico led to his sighting of the mountain that now bears his name.

Answer: Zebulon Pike

15. He never married, possibly because he worked with such odiferous compounds, and did research at Heidelberg until his death. His first work, on the cacodyl group of compounds, proved the compound radical theory of organic molecules; however, his work with the toxic chemicals cost him an eye and almost led to his death from arsenic poisoning. FTP, name this German chemist, who invented a zinc-carbon primary cell and the filter pump, discovered cesium and rubidium with Kirchhoff, and who is best known for the gas burner named for him.

Answer: Robert Bunsen

16. This mostly mountainous nation is bordered on the south by the Gulf of Chiriqui. One of its larger cities is Santiago near the Arzuero Peninsula. Darien National Park lies along its entire eastern border. FTP, name this country most important for its narrowness, and thus for the canal running through it.

Answer: Panama

17. While her first short stories, collected in Face to Face and The Soft Voice of the Serpent, were quite successful, she struggled with her early novels, such as The Lying Days and A World of Strangers. Following the tight structure of The Late Bourgeois World, she moved into her mature period, characterized by A Guest of Honor and The Conservationist. FTP, identify this author of Burger's Daughter and July's People, a Nobel Prize winner from South Africa.

Answer: Nadine Gordimer

18. On April 10, five Englishmen had been killed and a woman beaten in riots against the Rowlatt Acts. Three days later, General Reginald Dyer ordered his Gurkhas to fire on an unarmed gathering until they ran out of ammunition, killing 379 and wounding over 1200. FTP, identify this 1919 event, which led Gandhi to call a halt to his civil disobedience campaign.

Answer: the Amritsar massacre

19. He worked as a London clerk before an inheritance allowed him to study medicine at St. Mary's. After serving in the Army Medical Corps in World War I, he began to investigate the possibilities of lysozyme as an antibacterial agent. FTP, name this bacteriologist, who in 1928 left a dish of staphylococci uncovered, leading to the discovery of penicillin.

Answer: Alexander Fleming

20. He committed suicide after escaping to the island of Calauria, in the wake of the Athenian concession to Antipater's demand to hand over leading patriots. His political reputation was sullied by the probably false accusation that he accepted a bribe from Harpalus, treasurer to Alexander the Great. FTP, name this man, who in 346 was part of the Athenian delegation negotiating peace with the Macedonians, an orator best known for the *Olynthiacs*, the *Philippics*, and for his solution of speaking with pebbles in his mouth to remedy his speech problems.

Answer: Demosthenes

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### Round Nine

#### Boni:

1. Identify the following plays by Henrik Ibsen, for the stated number of points.

1. 5 points: The main character of this play is Solness, an architect afraid of being outdone by the younger generation.

Answer: The Master Builder

2. 10 points: The title character of this 1882 work, Dr. Stockman, is persecuted by his fellow townspeople because he wants to shut down the baths.

Answer: An Enemy of the People

2. 15 points: This 1873 historical play is based on the life of Julian the Apostate.

Answer: Emperor and Galilean

2. Name the architects FTP each.

1. This architect designed the Villa Rotuna, begun around 1567.

Answer: Andrea Palladio

2. This Federal style architect designed the state houses of Maine and Massachusetts.

Answer: Charles Bulfinch

3. He designed the Crystal Palace for the Great Exhibition of 1851.

Answer: Joseph Paxton

3. Identify the following uprisings from world history, for the stated number of points.

1. 5 points: More than 20 million people died between 1850 and 1864 in this Christian rebellion against the Manchu dynasty.

Answer: Taiping rebellion

2. 10 points: This revolt of the French nobility and parliament against Mazarin lasted from about 1649 to 1653, but failed as the crown bought off most of the nobles.

Answer: the Fronde

3. 15 points: This revolt against British taxation in the Carolinas was led by the man it is named after. The rebels held power for two years, but were defeated in 1679. Answer: <u>Culpeper's</u> rebellion

4. FTP each, answer these questions about the analysis of electric circuits.

1. A kind of generalized resistance, it is called reactance in capacitors and inductors. At junctions between transmission lines, this quantity must be matched, but when connecting load elements in series, it should be low at an output and high at an input.

Answer: impedance

2. This theorem states any two terminal network of resistors, capacitors, inductors, and signal sources is equivalent to a single complex impedance in series with a single signal source.

Answer: Thevenin's theorem

3. These circuit elements can be mathematically described using the h-parameter model, but it is simpler to combine the Ebers-Moll equation with qualitative considerations.

Answer: transistors

- 5. Identify the twentieth century American poets from works on a 10-5 basis.
- 1. 10 points: "The Ivy Crown" and Asphodel, That Greeny Flower

5 points: Paterson

Answer: William Carlos Williams

2. 10 points: The Man With the Blue Guitar and "The Idea of Order at Key West"

5 points: "The Emperor of Ice Cream"

Answer: Wallace Stevens

3. 10 points: "Luke Havergal" and The Man Who Died Twice

5 points: "Richard Cory"

Answer: Edwin Arlington Robinson

- 6. Given the election and the candidate, identify the party which that candidate ran under, FTP each.
- 1. William Henry Harrison in 1836

Answer: Anti-Masonic
2. John Bell in 1860

Answer: Constitutional Union
3. Horatio Seymour in 1868

Answer: Democratic

7. Identify the following S-initialed economists FTP each.

1. This MIT professor won the Nobel Prize in 1970, and helped to make economics a rigorous mathematical discipline in works like *Foundations of Economic Analysis*.

Answer: Paul Samuelson

2. This Austrian came to America in 1932 and is best known for *The Theory of Economic Development*, *Business Cycles*, and *Capitalism*, *Socialism and Democracy*.

Answer: Joseph Schumpeter

- 3. The author of *Models of Man* and *The Shape of Automation*, he won the Nobel Prize in 1978 and is best known for his work on administrative science and large-scale information processing. Answer: Herbert Simon
- 8. Chemical psychology has come a long way in the last 30 years, due to our increasing understanding of neurotransmitters. Identify these neurotransmitters FTP each.
- 1. Present in schizophrenics in excessive amounts, its release is stimulated by cocaine. Lost production of it is linked to Parkinson's.

Answer: dopamine

2. The other primary catecholamine neurotransmitter, it is produced by the adrenal glands and secreted from nerve endings in the sympathetic nervous system. It is associated with anger, rage, fear, and other strong emotions.

Answer: <u>norepinephrine</u> or <u>noradrenaline</u>

- 3. The most important indoleamine, it was first detected in the blood stream, hence its name. It has been strongly linked to suicide, criminality, and OCD.

  Answer: serotonin
- 9. Identify the following treaties of the nineteenth century, for the stated number of points.
- 1. 5 points: This 1848 treaty settled the Mexican-American War by providing for the sale of most of the west.

Answer: Treaty of Guadeloupe Hidalgo

2. 10 points: This 1878 treaty, which superseded the treaty of San Stefano, ended the Russo-Turkish War, creating an independent Bulgaria and recognizing the independence of Rumania and Serbia.

Answer: Treaty of Berlin

3. 15 points: This 1895 treaty ended the first Sino-Japanese War and forced China to recognize Korean independence.

Answer: Treaty of Shimonoseki

- 10. Given some members of a famous football defensive unit, supply the nickname given to the group FTP each.
- 1. Mark Gastineau, Joe Klecko, Lance Mehl

Answer: The New York Sack Exchange

2. Alan Page, Jim Marshall

Answer: The Purple People Eaters

3. L.C. Greenwood, Joe Greene, Jack Ham

Answer: The Steel Curtain

- 11. Pencil and paper ready. Consider the two-by-two matrix whose first row has entries 5, 2 and whose second row is 2, 5. FTP each, identify the following concerning the matrix.
- 1. What is its determinant?

Answer: 21

2. What is its trace, or spur?

Answer: 10

Give either of its eigenvalues.

Answer: 3 or 7

12. Answer the following questions about an American thinker FTP each.

1. This author of *Essays in Radical Empiricism* developed the work of Peirce in such works as *The Meaning of Truth* and *Pragmatism*.

Answer: William James

- 2. After delivering the Gifford lectures at Edinburgh in 1902, James worked them into this book, subtitled "A Study in Human Nature," which argued for acceptance for different kinds of faith. Answer: The <u>Varieties of Religious Experience</u>
- 3. Considered James's masterpiece, this 1890 work rapidly became a standard college textbook. Summing up the field it describes, it points to the need for objective research, and offers the first formal study of what James called the "stream of consciousness."

Answer: The Principles of Psychology

- 13. Identify the following concerning a Charles Dickens novel FTP each.
- 1. Serialized in *All the Year Round* during 1861, the main character and Estella stayed apart in the original version of the story, but Bulwer-Lytton convinced Dickens to bring them together for a happier ending.

Answer: Great Expectations

2. Name the main character of *Great Expectations*, an orphan who narrates the novel.

Answer: Philip Pirrip or Pip

3. Pip helps this convict, who is recaptured and taken back to The Hulks. Later, he is revealed to be both Pip's mysterious benefactor and Estella's father.

Answer: Abel Magwitch

- 14. Identify the following from the history of civil rights in America, FTP each.
- 1. It was formed during a sit-in at a lunch counter in Greensboro in 1960. Ironically, it advocated direct militance, not nonviolence.

Answer: Student Nonviolent Coordinating Committee or SNCC

2. In 1966, he became the leader of SNCC, and used his position to promote the Black Power movement.

Answer: Stokely Carmichael

3. Organized Black Power ended in 1968, when a coalition of the Black Panthers, SNCC, and this group, abbreviated SOBU, disbanded.

Answer: Student Organization for Black Unity

15. Name the religious figures FTP each.

1. This 14th century English religious reformer was known as the "Evangelic Doctor."

Answer: John Wyclif

2. This 12th century Cistercian was known as the "Mellifluous Doctor" and his writings were called a "river of Paradise."

Answer: Bernard of Clairvaux

3. This Franciscan and scholastic philosopher wrote a life of St. Francis and was known as the "Seraphic Doctor."

Answer: St. Bonaventure

16. FTP each, identify these phyla.

1. Including hydras, jellyfish, sea anemones, and coral animals, their tentacles are armed with batteries of cells containing stinging capsules called nematocysts.

Answer: Cnidaria or Coelenterata

2. Members of this phylum are called ribbon worms, and are similar to flatworms except for a small hydraulic proboscis used in the capturing of prey.

Answer: Nemertea

3. Smaller than many protozoa, members of this phylum are nonetheless truly multicellular, with a digestive tract and other internal organs. Their name derives from the crown of cilia which draws a swirling vortex of water into their mouths.

Answer: Rotifera

- 17. Identify the musical work, 30-20-10.
- 1. The text was adapted by the composer's friend Charles Jennens. Although it is two and a half hours long, it took the composer only 24 days to write.
- 2. The world premiere took place in Dublin on April 13, 1742. When King George II heard it a year later, he gave it a famous standing ovation.
- 3. This Handel oratorio is divided into 3 parts: the coming, suffering and death, and resurrection of Jesus Christ.

Answer: The Messiah

- 18. Identify the following concerning a contemporary playwright for the stated number of points.
- 1. 10 points: After her death from cancer at the age of 34, her husband, Robert Nemiroff, completed her two last plays.

Answer: Lorraine Hansberry

2. 5 points: Lorraine Hansberry's first play was this 1959 work, dealing with a black family trying to escape the Chicago ghetto.

Answer: A Raisin in the Sun

3. 15 points: The main character of this 1964 Hansberry play is a Jew who rediscovers his belief in social justice after becoming disillusioned.

Answer: The Sign in Sidney Brustein's Window

- 19. Answer the following questions about Reconstruction FTP each
- 1. In August 1866, President Johnson organized this political party in an effort to offset the power of Congress's Radical Republicans.

Answer: National Union party

2. It was established on March 3, 1865 to help former slaves make the transition to their new lives.

Answer: <u>Freedmen's Bureau</u>

3. After Grant refused, Johnson named, in violation of the Tenure of Office Act, this man to succeed Edwin Stanton as Secretary of War.

Answer: Lorenzo Thomas

- 20. Answer the following questions about Japan FTP each.
- 1. It is Japan's largest island.

Answer: Honshu

2. It is the smallest of Japan's four main islands.

Answer: Shikoku

3. It is the largest city on Hokkaido.

Answer: Sapporo