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1	<p style="text-align: center;">概率与统计规律</p> <p style="text-align: center;">谭天荣 青岛大学 物理系, 青岛, 山东 266071, 中国 ttr359@126.com</p> <p>内容提要：这里是一组批判卡尔·波普尔的概率理论的文章。波普尔是一个精通数理科学的哲学家，他曾经提出概率的倾向性诠释与量子力学的统计系综诠释。然而，正是在数理科学的领域中，他有两次颇为引人注目的败走麦城。一次是在《科学发现的逻辑》一书中，初出茅庐的波普尔试图设计一个违反“测不准原理”的“判决性实验”。当他认识到自己的错误时，有很长一段时间“处于一种失败主义的情绪中”。另一次是功成名就的波普尔预测检验贝尔不等式的实验将得出反驳量子力学的结论，结果却适得其反，使他大吃一惊。诚然，尽管有这种经历，波普尔仍然是二十世纪最卓越的学者之一。但这两次挫折毕竟表明在波普尔的哲学思想特别是他的概率理论有某些问题。问题究竟在什么地方呢？我将这一组文章中进行探讨。[Academia Arena, 2010;2(4):1-19] (ISSN 1553-992X).</p> <p>关键词：概率理论；随机事件；统计规律；统计资料</p>	Full Text
2	<p style="text-align: center;">气体分子的两种平均自由程</p> <p style="text-align: center;">谭天荣 青岛大学 物理系, 青岛, 山东 266071, 中国 ttr359@126.com</p> <p>内容提要：一个气体分子的“自由程”有两种含义，其一指它在两次碰撞之间飞过的路程，另一是指它从某一观察时刻起，到该时刻以后第一次碰撞时刻为止所飞过的路程。本文证明：对于全体气体分子来说，麦克斯韦自由程是前一种路程的平均值；麦克斯韦自由程则是后一种路程的平均值。 [Academia Arena, 2010;2(4):20-23] (ISSN 1553-992X).</p> <p>关键词：分子运动论；分子射线；自由程；碰撞频率；麦克斯韦自由程；泰特自由程</p>	Full Text
3	<p style="text-align: center;"><i>In Vitro Sterilization Protocol for Micropropagation of Solanum tuberosum cv. 'Kufri Himalini'</i></p> <p style="text-align: center;">Anoop Badoni* and J. S. Chauhan Seed Biotechnology Laboratory Department of Seed Science and Technology H. N. B. Garhwal University, Chauras Campus, Srinagar- 246 174 *For Correspondence: annabadoni@yahoo.co.in</p> <p>ABSTRACT : For obtaining contamination free cultures the most important step is sterilization of explants. In the present study the sterilization procedure was standardize for potato cultivar Kufri Himalini. Comparison was done between two important sterilitant sodium hypochlorite and mercuric chloride with three time duration 2, 5 and 8 minutes. After sprouting the sprouts of 0.5 to 1 cm. were taken for the study and treated by chemicals of surface sterilization with three selected timings i.e. 2, 5 and 8 minutes. Sterilized explants were inoculated on without hormones MS medium to evaluate the response of different chemicals. The observations were recorded regularly till to 30 days for the non-growing cultures, infected cultures and healthy cultures. Result showed that amongst the two sterilitants i.e. NaOCl and HgCl₂, NaOCl was found better for controlling</p>	Full Text

	<p>the infection and it had not any adverse effect on explants even in long duration. Sodium hypochlorite (NaOCl) for 8 minute (T3) was selected for suitable sterilization chemical after 5 minute of savlon wash, 30-second dip in ethanol and at last washed with double distilled water. [Academia Arena, 2010;2(4):24-27] (ISSN 1553-992X).</p> <p>Keywords: Sterilant, contamination, surface sterilization and explants</p>	
4	<p style="text-align: center;">潮汐是月亮引起的吗？ 袁玉刚 甘肃玉门油田分公司开发处, 玉门, 甘肃 735200, China 电话号码：0937——3921257; 电子邮箱：yuanyg420@sohu.com</p> <p>内容摘要：从地球背向太阳和月亮的一面也会涨潮和初一的潮汐并不比十五的大以及月亮公转滞后于地球和潮汐的自然现象，质疑天体引起地球潮汐的理论，提出了地球系、太阳系旋涡力形成地球旋臂的思想，用旋臂及其重合解释了各种潮汐的起因。[Academia Arena, 2010;2(4):28-29] (ISSN 1553-992X).</p> <p>主题词：潮汐 月亮 旋涡力 旋臂</p>	Full Text
5	<p style="text-align: center;">论万有场 原创者：陈果仁 guozhi6@hotmail.com, gchow@princeton.edu</p> <p>摘要：我们已经知道，正电场与负电场互为对称场，磁场 S 极与 N 极互为对称场，在本文中我们将知道，正核场与负核场互为对称场，正万有场（万有引力场）与负万有场（万有斥力场）互为对称场。[Academia Arena, 2010;2(4):30-32] (ISSN 1553-992X).</p> <p>关键词：正核场、负核场、正万有场、负万有场。</p>	Full Text
6	<p style="text-align: center;">SCREENING SIX CULTIVARS OF COWPEA (<i>Vigna unguiculata</i> (L.) Walp FOR ADAPTATION TO SOIL CONTAMINATED WITH SPENT ENGINE OIL</p> <p style="text-align: center;">Agbogidi, O. M. Faculty of Agriculture, Delta State University, Asaba Campus, Delta State, Nigeria. omagbogidi@yahoo.com; 07038679939</p> <p>Abstract: Field experiments were carried out in 2007 and 2008 growing seasons at the Delta State University, Asaba Campus teaching and Research Farm to screen six cultivars of cowpea for adaptation to soil contaminated with spent engine oil. 0 (control), 25, 50, 75 and 100ml of the oil served as the treatments. The experiment was arranged in a randomized complete block design with four replications. The results showed that cowpea cultivars grown in 25ml of spent engine oil gave consistently significant higher (P 0.05) values than the control and the other treatments (50, 75 and 100ml) of the spent oil plant height, leaf area, number of leaves, stem diameter, days to 50% flowering, member of nodes on main stem, number of branches, and number and length of penducle. The results also showed that as from the 50ml of oil application to soil, all the traits examined showed significant reductions (P≥ 0.05) when compared to their controls however, TVx3226 and IT84S – 2246-4 were higher in performance whereas, IT890.699 and IT870- 941-1, showed the lowest inhibitory effect. The current study has demonstrated that spent engine oil has a highly significant effect of reducing the growth characteristics of the six cultivars of cowpea examined. [Academia Arena, 2010;2(4):33-40] (ISSN 1553-992X).</p> <p>Keywords: Screening, cowpea cultivars, adaptation, spent engine oil</p>	Full Text
7	<p style="text-align: center;">癌病白血病艾滋病起因和防治供参考 孙纯武 江苏省扬州三力电器集团, 中国江苏省扬州市西湖镇59号 电话: 0514— 82822538 邮编225008; 电子信箱: yzscw@163.com</p> <p>摘要：一个人如果精神长期性处于气、忧、愁、怒、悲等苦不堪言的向心力能量气向脑海和细胞中输送，或在同生病前后养成不好的生活习惯，多吃了高脂肪、高蛋白食物，或者偏食几种食物，它就不不断加强了细胞内向心力和离心力增强作用，这两种不同作用力推挤摩擦发热出的高温就高。特</p>	Full Text

	<p>关键词：现代化；社会主义；社会主义社会；社会主义初级阶段；中国特色的社会主义；消除城乡、工农、地区3大差别；前资本主义社会；后资本主义社会；社会主要生产力的动力</p>	
11	<p style="text-align: center;">Regarding ultimate fate of our mother earth</p> <p style="text-align: center;">Manjunath. R. (Reader in physics) #16, 8th Main road, Shivanagar, Rajajinagar, Bangalore-560010, Karnataka, India manjunath5496@gmail.com; manjunathr1988@yahoo.in</p> <p>Abstract: From past several centuries many scientists are struggling hard to understand the truth of ultimate fate of our mother earth. Most of the assumptions and predictions regarding the ultimate fate of our mother earth have been proved to be wrong. I have made an attempt to figure out the ultimate fate of our mother earth through a mathematically derived equation i.e $R = c/H \operatorname{cosec} \left[\left(\frac{\rho}{\rho_0} \right)^{1/3} - 1 \right]$ { where R=Radius of elliptical orbit in which earth moves around the sun, c= speed of light in vacuum ($3 \times 10^8 \text{m/s}$), H=present Hubble constant (which is the function of time), ρ_0 = present mass density of universe, ρ = later mass density of universe which vary with respect to time 't'. θ =angle between concepts d_1 and d respectively}. The above expression was developed based on cosmological, astronomical and mathematical concepts. The above paper also describes about the variation of radius of earth's elliptical orbit around the sun with mass density of infinite universe. [Academia Arena, 2010;2(4):77-84] (ISSN 1553-992X).</p> <p>Keywords: Angle, Density, Radius</p>	<p>Full Text</p>
12	<p style="text-align: center;">学郭光灿的《爱因斯坦的幽灵》量子纠缠之跋 --人们很可能在弦和圈的美丽中迷失方向（1）</p> <p style="text-align: center;">葛代序 Ge Daixu Email Address: y-tx@163.com</p> <p>摘要 中国“概率克隆之父”郭光灿院士，是一位“高锟型”的科学家，有望获得诺贝尔科学奖。现在郭光灿院士公开出版了《爱因斯坦的幽灵----量子纠缠之谜》一书，我们想通过对该书的研究，以他助一把之力。 [Academia Arena, 2010;2(4):85-91] (ISSN 1553-992X).</p> <p>关键词 纠缠 超光速 三旋</p>	<p>Full Text</p>
13	<p style="text-align: center;">学郭光灿《爱因斯坦的幽灵》的无用之学？ ---人们很可能在弦和圈的美丽中迷失方向（2）</p> <p style="text-align: center;">葛代序 Ge Daixu Email Address: y-tx@163.com</p> <p>摘要: 纠缠不等于共轭，共轭不等于缠结，缠结不等于幽灵，幽灵不等于超光速，超光速不等于实数超光速，实数超光速不等于虚数超光速。量子隐形传输态到底能够应用到什么程度？从量子密码到完全保密的量子通信，从量子计算机到未来的量子互联网，还远远不够，它的底线也许还涉及未来低碳能源等类似量子色动化学一类的应用。 [Academia Arena, 2010;2(4):92-99] (ISSN 1553-992X).</p> <p>关键词: EPR 纠缠 隐形传输 退相干</p>	<p>Full Text</p>