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	【内容摘要】：**本文根据近代宇宙天文学和物理学的一些基本规律和公式,通过计算所得的数据，证明了我们现在膨胀的宇宙不可能诞生于"奇点"或"奇点的大爆炸"。按照时间对称原理，假设我们宇宙是从前辈宇宙的"大塌缩"而来，其最后的塌缩规律与我们宇宙诞生时的膨胀规律相同，那么，本文中新推导出前辈宇宙的"大塌缩"公式. (3c)式就是来的最重要的公式，一旦前辈宇宙大塌陷到(3c), $t \le [k_1 (2G\kappa)/C^5]^{2/3}$，即 $t = -0.5563\times 10^{-43}$s秒和宇宙最高温度 $T = 0.734\times 10^{32}$k 时，前辈宇宙中的每个能量-物质粒子m同时进入3种状态：1。每个粒子m都与其相邻的粒子因无足够时间转递引力而失去了引力联系以至于无法继续塌缩。2。每个粒子m都变成为 $M_{bm}\approx 10^{-5}$g 的史瓦西最小黑洞。3。同时进入普郎克领域而成为普郎克粒子 m_p, 于是，$m = \mathbf{M_{bm}} = m_p = 1.09\times 10^{-5}$g.正是"宇宙包"内每个粒子m 的这3种状态的共同作用，导致所有的m在封闭的"宇宙包"内停止收缩而爆炸解体，并与整个前辈宇宙同步消失在普朗克领域，从而共同阻止了前辈宇宙在普朗克领域继续塌缩成为"奇点"。同时，前辈宇宙的爆炸解体造成"宇宙包"内的温度和密度的下降，从而使宇宙中新生出来稍大而稳定的无数最小黑洞 $2M_{bm}$。它们就成为我们现在新宇宙的"胚胎"，它们的合并就是我们宇宙的诞生，同时造成了我们新生宇宙诞生后在 $t_o < 2\times 10^{-37}$ 前的"原始暴涨"，并形成许多更大的"小黑洞"将宇宙连接成一个整体。这些"小黑洞"的继续合并膨胀就形成了我们现在膨胀的宇宙。本文还完全证实了我们现在宇宙是一个真实的宇宙大黑洞 (UBH)，这样，宇宙诞生和演化中的各种难题就简化成为一般黑洞的生长衰亡规律。本文还论述了从前辈宇宙的大塌缩到我们新生宇宙大膨胀的转变过程。还首次提出了产生宇宙的"原初暴涨"新的机理，并做出了新的解释、论证和计算。本文中唯一的最简单的假设就是按照时间反演和对称规律，推断我们宇宙的诞生来源于前辈宇宙的最后大塌缩。这种假设也是最简单而符合奥康姆剃刀 (Ockham's razor)原则的。不像"奇点"那样不可理解，无法计算出与现今宇宙参数之间的任何有规律关系。本文所有的结论和计算结果都符合因果律：凡是有开端的事实都有原因。也完全符合现有的经典理论的基本公式的计算数据和近代天文物理的观测数据和结论。** **（参考文献编号）** [Dongsheng Zhang. **对宇宙起源的新观念和完整论证：宇宙不可能诞生于奇点**. Academia Arena 2010;2(12):72-818]. (ISSN 1553-992X). http://www.sciencepub.net. **【关键词】：宇宙不是产生于"奇点"或者"奇点的大爆炸"；宇宙诞生于($M_{bm}\approx 10^{-5}$g)史瓦西最小黑洞；宇宙的 "原初暴涨"（Original Inflation)产生于大量最小黑洞的合并；宇宙与黑洞的同一性；我们宇宙本身就是一个宇宙大黑洞；哈勃定律就是宇宙黑洞的膨胀规律**		
7	**Bacteriology Of Orofacial Infections In Gombe, Nigeria** Osazuwa F*Adewolu Olusanya Adebayo^ Alli OAT# Osazuwa EO$ *Department of medical microbiology, University of Benin Teaching Hospital, Benin City, Nigeria. ^Department of Oral and Maxillofacial surgery, Federal medical Centre, Gombe, Nigeria # Department of biomedical sciences, Ladoke Akintola University of technology, Ogbomosho, Nigeria. $ Department of Pharmaceutical microbiology, University of Benin, Benin City, Nigeria Corresponding author: Osazuwa F: E mail: osazuwafavour@yahoo.com **ABSTRACT:** This study was aimed at determining the pattern of microorganisms seen in Orofacial infections as well as investigating the antibiotic sensitivity pattern of the isolates. Specimens were obtained ascetically from 36 patients presenting with Orofacial infections at the dental Clinic, federal Medical centre, Gombe, Nigeria. The specimen was transported in an aerobically pre-reduced transport medium for processing in the laboratory. Isolation and identification were done employing standard bacteriological techniques. Antibiotic susceptibility testing was performed by the disk diffusion method. All the 36 clinical samples obtained yielded growth of bacteria. Anaerobes were cultured from 34 (94.4%) specimens while 2 specimens yielded only *Streptococcus* spp. Majority of the anaerobes were susceptible to commonly available antibiotics. Ciprofloxacin and cloxacillin demonstrated strongest invitro activity against all isolates. The study revealed again the polymicrobial nature of Orofacial infections as well as the predominance of anaerobes in the aetiology of these infections. [Osazuwa F Adewolu Olusanya Adebayo^ Alli OAT# Osazuwa EO$. **Bacteriology Of Orofacial Infections In Gombe, Nigeria.** Academia Arena 2010;2(12):82-84]. (ISSN 1553-992X).	Full Text	7

	http://www.sciencepub.net. Key words: Bacteriology, Orofacial infections Antibiotic sensitivity testing anaerobic organisms		
8	**饶毅和吴忠超与达尔文和霍金** **囡岛 摘编** Recommended by **王德奎** y-tx@163.com Abstract: **所谓** Occam **剃刀，是以最简单的理论解释实验的结果和观察到的现象。如果简单理论可以，就不用复杂理论来解释。如果用复杂理论来解释，那么复杂加复杂可以叠很多层，就很难讨论和验证。** [**囡岛. 饶毅和吴忠超与达尔文和霍金**. Academia Arena 2010;2(12):85-90]. (ISSN 1553-992X). http://www.sciencepub.net. Keywords: **饶毅**; **吴忠超**; **达尔文**; **霍金**	Full Text	8
9	**Chemical Composition and Antibacterial Activity Studies on Callus of *Fagonia arabica* L.** **Eman, A. Alam*; Gehan, H. Amin**; Yassin, M . ElAyouty** and Mohamed, S. Abdel-Hady*** *,Botany Department, National Research Centre, Dokki,Giza, Egypt. **, Botany Department, Faculty of Science, Zagazig University, Egypt. **Corresponding author: eman200980@hotmail.com** **Abstract:** *Fagonia spp.* are wild medicinal plants which contain many bioactive constituents used for the treatment of many dangerous diseases, however this fact there were few studies regarding *in vitro* production of these bioactive substances, so we will try to use organ culture technique for this purpose. Callus cultures obtained from leaf, hypocotyle and terminal bud explants of *Fagonia spp.* (*Fagonia arabcia*, *Fagonia indica* and *Fagonia bruguieri*) were studied. This study revealed that leaf of *F. arabica* was the most suitable explant to induce calli especially on MS medium supplemented with 5mg/l kinetin + 1 mg/l NAA, this medium gave the highest percentage of calli induction, while the highest amount of calli was obtained using 5mg/l kinetin + 1 mg/l 2,4-D after six weeks, while MS medium supplemented with 6 mg/l kinetin+ 2 mg/l NAA represented the maintenance medium for giving large amount of yellow healthy calli after four weeks. The best sucrose concentration for obtaining the highest amount of both callus fresh and dry weights is 40 g/l. Maximum growth rates of this callus on both solid and liquid media was recorded after 20 and 10 days respectively. Preliminary phytochemical screening on this callus revealed the presence of carbohydrates and / or glycosides, saponins, sterols and/or triterpenoids, alkaloids, cardiac glycosides, cyanogenic glycosides, flavonoids, coumarins, irodoids, chlorides and sulphates, but this callus devoid of tannins and anthraquinones. Studying the chemical composition of this callus showed that it contains; raffinose, fructose, ribose and sucrose, the most dominant type of carbohydrates is fructose (7.77mg/g fresh weight).Callus contains also amino acids; aspartic acid, glutamic acid, serine, glycine, histidine, argenine, threonine, valine, isoleucine, leucine and phenylalanine, the most dominant type of amino acids is phenylalanine (25 mg/g fresh weight). Total phenols, alkaloids, flavonoids, saponins and oils present in fresh callus were 1.95, 113.40, 0.78, 10 mg/g and 0.68 % respectively. Six fatty acids were isolated and identified; myristic, palmitic, stearic, oleic, lenoleic and lenoleinic acids, the most dominant type of these fatty acids is oleic acid (45.7%). Comparative study through the antibacterial activity was carried out between callus and the intact leaf showed that, the antibacterial effect of this callus superior that of the intact leaf. **[**Eman, A. Alam; Gehan, H. Amin; Yassin, M. ElAyouty and Mohamed, S. Abdel-Hady. Chemical Composition and Antibacterial Activity Studies on Callus of *Fagonia arabica* L. Academia Arena 2010;2(12):91-106]. (ISSN 1553-992X). http://www.sciencepub.net. **Key words:** *Fagonia arabica*, *Fagonia indica*, *Fagonia bruguieri*, callus, chemical composition, antibacterial activity	Full Text	9